TASK 210:
SUBSURFACE SITE INVESTIGATION REPORT
VOLUME 2

New Haven Line
Catenary Replacement Sections C1a & C2
East Norwalk, Westport, Bridgeport and Stratford, Connecticut

Rehabilitation of Bridge No. 08028R over Osborne Avenue
East Norwalk, Connecticut

ConnDOT Assignment No. 204-4191
ConnDOT Project No. 301-0145
ConnDOT Project No. 301-0040

Prepared for:

State of Connecticut
Department of Transportation
Newington, Connecticut 06131

Prepared by:

Maguire Group Inc.
2080 Silas Deane Highway
Rocky Hill, Connecticut 06067

July 25, 2012

APPENDIX B
Laboratory Reports

PHOENIX
Environmental Laboratories, Inc.

Sunday, June 17, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB91407, BB91409, BB91411 - BB91413

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

SDG Comments

June 17, 2012

SDG I.D.: GBB91404

BB91407 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	11:14
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91407

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-12 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	06/01/12		EK	6010
Arsenic	19.2	0.76	mg/Kg	06/01/12		EK	6010
Barium	111	0.38	mg/Kg	06/01/12		EK	6010
Cadmium	1.42	0.38	mg/Kg	06/01/12		EK	6010
Chromium	37.1	0.38	mg/Kg	06/01/12		EK	6010
Mercury	0.25	0.18	mg/Kg	05/31/12		RS	SW-7471
Lead	3130	38	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.014	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.053	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.063	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	1.50	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
TCLP Lead	5.06	0.10	mg/L	06/15/12		LK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/14/12		X/x	SW3005
Percent Solid	85		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/13/12		x	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	120	23	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	65		%	05/31/12		MH	30 - 150 %
% TCMX	62		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	37	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	37	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.7	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	57	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.7	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	37	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	37	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.7	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	105		%	06/01/12		KCA	30 - 150 %
% TCMX	87		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromoethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	12	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	89		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	76		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	102		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/03/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Methylnaphthalene	380	270	ug/Kg	06/03/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	06/03/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/03/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	06/03/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Acenaphthylene	280	270	ug/Kg	06/03/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Anthracene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Azobenzene	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Benz(a)anthracene	780	270	ug/Kg	06/03/12		KCA	SW 8270
Benzidine	ND	460	ug/Kg	06/03/12		KCA	SW 8270
Benzo(a)pyrene	650	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(b)fluoranthene	1300	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(ghi)perylene	300	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(k)fluoranthene	370	270	ug/Kg	06/03/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Carbazole	ND	580	ug/Kg	06/03/12		KCA	SW 8270
Chrysene	920	270	ug/Kg	06/03/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Dibenzofuran	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Fluoranthene	1100	270	ug/Kg	06/03/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	330	270	ug/Kg	06/03/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/03/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB91407

Client ID: GP-12 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	330	270	ug/Kg	06/03/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	06/03/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/03/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Pentachlorophenol	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Phenanthrene	660	270	ug/Kg	06/03/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Pyrene	1100	270	ug/Kg	06/03/12		KCA	SW 8270
Pyridine	ND	380	ug/Kg	06/03/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	85		%	06/03/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/03/12		KCA	15 - 130 %
% 2-Fluorophenol	72		%	06/03/12		KCA	15 - 130 %
% Nitrobenzene-d5	80		%	06/03/12		KCA	15 - 130 %
% Phenol-d5	71		%	06/03/12		KCA	15 - 130 %
% Terphenyl-d14	78		%	06/03/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	12:11
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91409

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-14 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	06/01/12		EK	6010
Arsenic	114	0.86	mg/Kg	06/01/12		EK	6010
Barium	77.9	0.43	mg/Kg	06/01/12		EK	6010
Cadmium	0.77	0.43	mg/Kg	06/01/12		EK	6010
Chromium	112	0.43	mg/Kg	06/01/12		EK	6010
Mercury	0.83	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	5730	43	mg/Kg	06/04/12		EK	6010
Selenium	1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.056	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.150	0.010	mg/L	06/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
TCLP Lead	14.8	0.10	mg/L	06/15/12		LK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/14/12		X/X	SW3005
Percent Solid	83		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/13/12		x	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	390	24	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	80		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	97		%	05/31/12		MH	30 - 150 %
% TCMX	95		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	85	38	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	103		%	06/01/12		KCA	30 - 150 %
% TCMX	94		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromoethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.1	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	90		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	78		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	99		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	670	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	2000	280	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	1500	280	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	6100	280	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	5300	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	3400	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	3400	280	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	740	600	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	8100	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	1500	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	320	280	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	3700	280	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	530	280	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	3300	280	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	77		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	93		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	88		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	94		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	71		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	12:55
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91411

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-20 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	6010
Arsenic	33.9	0.77	mg/Kg	06/01/12		EK	6010
Barium	42.8	0.39	mg/Kg	06/01/12		EK	6010
Cadmium	0.85	0.39	mg/Kg	06/01/12		EK	6010
Chromium	145	0.39	mg/Kg	06/01/12		EK	6010
Mercury	0.30	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	20700	390	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.005	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.038	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	1.15	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
TCLP Lead	38.2	1.0	mg/L	06/15/12		LK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/14/12		X/X	SW3005
Percent Solid	80		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/13/12		x	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	520	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	52	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	52	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	910	25	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	116		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	74		%	05/31/12		MH	30 - 150 %
% TCMX	64		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	110	39	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	72		%	06/01/12		KCA	30 - 150 %
% TCMX	75		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.0	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromoethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	33	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	130	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.7	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	4.0	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	40	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	84		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	78		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	98		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	4500	1400	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	3100	1400	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	13000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	2500	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	11000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	19000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	4900	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	6000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	3100	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	15000	1400	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	1800	1400	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	25000	1400	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	5100	1400	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	1400	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB91411

Client ID: GP-20 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	1700	1400	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	7500	1400	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	25000	1400	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	124		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	91		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	94		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	91		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	85		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	92		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	13:20
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91412

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-21 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	6010
Arsenic	11.4	0.78	mg/Kg	06/01/12		EK	6010
Barium	80.7	0.39	mg/Kg	06/01/12		EK	6010
Cadmium	6.95	0.39	mg/Kg	06/01/12		EK	6010
Chromium	20.2	0.39	mg/Kg	06/01/12		EK	6010
Mercury	0.13	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	1400	3.9	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.011	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.020	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.024	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	0.0006	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.756	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
TCLP Lead	0.87	0.10	mg/L	06/15/12		LK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/14/12		X/X	SW3005
Percent Solid	85		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/13/12		x	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	97	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	97	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	91		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	220	12	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	78		%	05/31/12		MH	30 - 150 %
% TCMX	74		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	74	ug/Kg	06/06/12		KCA	SW8081
4,4' -DDE	ND	120	ug/Kg	06/06/12		KCA	SW8081
4,4' -DDT	ND	74	ug/Kg	06/06/12		KCA	SW8081
a-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Alachlor	ND	37	ug/Kg	06/06/12		KCA	SW8081
Aldrin	ND	12	ug/Kg	06/06/12		KCA	SW8081
b-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Chlordane	ND	120	ug/Kg	06/06/12		KCA	SW8081
d-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Dieldrin	ND	12	ug/Kg	06/06/12		KCA	SW8081
Endosulfan I	ND	37	ug/Kg	06/06/12		KCA	SW8081
Endosulfan II	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endosulfan sulfate	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endrin	ND	92	ug/Kg	06/06/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endrin ketone	ND	74	ug/Kg	06/06/12		KCA	SW8081
g-BHC	ND	12	ug/Kg	06/06/12		KCA	SW8081
Heptachlor	ND	23	ug/Kg	06/06/12		KCA	SW8081
Heptachlor epoxide	ND	37	ug/Kg	06/06/12		KCA	SW8081
Methoxychlor	ND	370	ug/Kg	06/06/12		KCA	SW8081
Toxaphene	ND	370	ug/Kg	06/06/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	50		%	06/06/12		KCA	30 - 150 %
% TCMX	70		%	06/06/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	06/01/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dibromoethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/01/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/01/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	06/01/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	06/01/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/01/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		H/J	SW8260
Toluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/01/12		H/J	70 - 130 %
% Bromofluorobenzene	85		%	06/01/12		H/J	70 - 130 %
% Dibromofluoromethane	124		%	06/01/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/01/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	12000	2700	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	9500	2700	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	50000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	4700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	38000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	77000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	13000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	20000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	5900	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	51000	2700	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	6200	2700	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	110000	2700	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	14000	2700	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	2700	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB91412

Client ID: GP-21 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	8800	2700	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	110000	2700	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	*Diluted Out		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C10 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

* For Pesticides, due to matrix interference from non target compounds in the sample an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	13:49
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91413

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		EK	6010
Arsenic	28.0	0.83	mg/Kg	06/01/12		EK	6010
Barium	54.2	0.42	mg/Kg	06/01/12		EK	6010
Cadmium	0.77	0.42	mg/Kg	06/01/12		EK	6010
Chromium	147	0.42	mg/Kg	06/01/12		EK	6010
Mercury	0.26	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	14600	42	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.010	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.012	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.054	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	3.22	0.10	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
TCLP Lead	44.7	1.0	mg/L	06/15/12		LK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/14/12		X/X	SW3005
Percent Solid	81		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/13/12		x	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	84		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	1200	60	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	71		%	05/31/12		MH	30 - 150 %
% TCMX	74		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	230	39	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/01/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	74		%	06/01/12		KCA	30 - 150 %
% TCMX	81		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromoethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	80		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	97		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	5600	2800	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	4100	2800	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	20000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	4900	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	16000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	27000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	6500	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	9300	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	6100	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	21000	2800	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	36000	2800	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	7300	2800	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	2800	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	11000	2800	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	32000	2800	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	*Diluted Out		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 17, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201639, QC Sample No: BB90808 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.004	0.004	NC	104	106	1.9	108	104	3.8	75 - 125	20	
Barium	BDL	0.023	0.023	NC	102	104	1.9	105	102	2.9	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	106	108	1.9	109	106	2.8	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	101	104	2.9	105	102	2.9	75 - 125	20	
Lead	BDL	0.019	0.019	NC	101	103	2.0	104	101	2.9	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	107	108	0.9	110	109	0.9	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	99.9	101	1.1	104	100	3.9	75 - 125	20	
QA/QC Batch 201720, QC Sample No: BB91030 (BB91404, BB91405, BB91406, BB91407)													
Mercury - Soil	BDL	0.55	0.37	NC	97.0	105	7.9	83.0	69.7	17.4	70 - 130	30	m
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201722, QC Sample No: BB91197 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Water	BDL	0.0004	0.0003	NC	93.0	93.8	0.9	92.2	87.9	4.8	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201811, QC Sample No: BB91409 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Soil	BDL	0.83	0.39	72.1	111	108	2.7	NR	NR	NC	70 - 130	30	r
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201676, QC Sample No: BB91705 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - Soil													
Arsenic	BDL	3.86	3.95	NC	86.2	87.0	0.9	90.8	90.6	0.2	75 - 125	30	
Barium	BDL	76.7	77.4	0.90	101	99.3	1.7	NC	NC	NC	75 - 125	30	
Cadmium	BDL	0.27	0.52	NC	88.8	88.3	0.6	91.7	91.8	0.1	75 - 125	30	
Chromium	BDL	17.2	15.5	10.4	92.7	93.6	1.0	101	102	1.0	75 - 125	30	
Lead	BDL	158	152	3.90	88.5	90.3	2.0	NC	NC	NC	75 - 125	30	
Selenium	BDL	<1.6	<1.7	NC	89.4	90.0	0.7	81.7	82.4	0.9	75 - 125	30	
Silver	BDL	<0.41	<0.42	NC	89.8	90.9	1.2	95.6	95.5	0.1	75 - 125	30	
QA/QC Batch 202564, QC Sample No: BB97075 (BB91407, BB91409, BB91411, BB91412)													
ICP Metals - TCLP Extraction													
Lead	BDL	0.54	0.58	7.10	100	97.0	3.0	103	102	1.0	75 - 125	20	
QA/QC Batch 202680, QC Sample No: BB97989 (BB91413)													
ICP Metals - TCLP Extraction													
Lead	BDL	0.0335	<0.10	NC	102	100	2.0	101	99.1	1.9	75 - 125	20	

m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 17, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201595, QC Sample No: BB90234 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	45	35	25.0				40 - 140	30	l
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	41	34	18.7				40 - 140	30	l
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	104	37	31	17.6				30 - 150	30	
% TCMX (Surrogate Rec)	91	40	33	19.2				30 - 150	30	
QA/QC Batch 201579, QC Sample No: BB90759 (BB91404, BB91405)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	115	92	22.2	84	93	10.2	50 - 150	30	
% n-Pentacosane	66	107	89	18.4	76	83	8.8	50 - 150	30	
QA/QC Batch 201601, QC Sample No: BB91037 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	82	82	0.0	76	81	6.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	85	86	1.2	85	84	1.2	40 - 140	30	
2,4-D	ND	95	93	2.1	99	106	6.8	40 - 140	30	
2,4-DB	ND	60	57	5.1	65	63	3.1	40 - 140	30	
Dalapon	ND	54	62	13.8	Intf	Intf	NC	40 - 140	30	
Dicamba	ND	116	105	10.0	117	111	5.3	40 - 140	30	
Dichloroprop	ND	85	85	0.0	75	74	1.3	40 - 140	30	
Dinoseb	ND	70	78	10.8	69	68	1.5	40 - 140	30	
% DCAA (Surrogate Rec)	83	72	72	0.0	74	72	2.7	30 - 150	30	
QA/QC Batch 201594, QC Sample No: BB91093 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	83	81	2.4	83	82	1.2	30 - 130	30	
1,2,4-Trichlorobenzene	ND	77	76	1.3	78	78	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	77	77	0.0	79	79	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	75	75	0.0	76	77	1.3	30 - 130	30	
1,4-Dichlorobenzene	ND	76	76	0.0	77	77	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	86	87	1.2	95	95	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	83	82	1.2	94	94	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	86	85	1.2	91	91	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	69	62	10.7	72	70	2.8	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	18	11	48.3	30 - 130	30	l,m,r

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	90	89	1.1	95	94	1.1	30 - 130	30	
2,6-Dinitrotoluene	ND	89	88	1.1	95	95	0.0	30 - 130	30	
2-Chloronaphthalene	ND	81	81	0.0	85	86	1.2	30 - 130	30	
2-Chlorophenol	ND	79	79	0.0	85	85	0.0	30 - 130	30	
2-Methylnaphthalene	ND	80	81	1.2	83	82	1.2	30 - 130	30	
2-Methylphenol (o-cresol)	ND	80	80	0.0	84	84	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	77	74	4.0	92	91	1.1	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	80	80	0.0	87	86	1.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	8.5	8.2	3.6	71	49	36.7	30 - 130	30	l,r
4-Bromophenyl phenyl ether	ND	85	85	0.0	89	89	0.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	88	85	3.5	94	93	1.1	30 - 130	30	
4-Chloroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	86	85	1.2	89	90	1.1	30 - 130	30	
4-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4-Nitrophenol	ND	86	83	3.6	99	96	3.1	30 - 130	30	
Acenaphthene	ND	80	80	0.0	85	85	0.0	30 - 130	30	
Acenaphthylene	ND	83	83	0.0	88	88	0.0	30 - 130	30	
Acetophenone	ND	78	77	1.3	83	83	0.0	30 - 130	30	
Aniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Anthracene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Azobenzene	ND	80	79	1.3	87	89	2.3	30 - 130	30	
Benz(a)anthracene	ND	87	87	0.0	95	95	0.0	30 - 130	30	
Benzidine	ND	41	43	4.8	24	33	31.6	30 - 130	30	m,r
Benzo(a)pyrene	ND	82	82	0.0	91	91	0.0	30 - 130	30	
Benzo(b)fluoranthene	ND	88	89	1.1	101	103	2.0	30 - 130	30	
Benzo(ghi)perylene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Benzo(k)fluoranthene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Benzyl butyl phthalate	ND	84	84	0.0	96	96	0.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	82	80	2.5	87	89	2.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	72	72	0.0	79	80	1.3	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	77	77	0.0	90	94	4.3	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	82	82	0.0	93	95	2.1	30 - 130	30	
Carbazole	ND	117	113	3.5	129	129	0.0	30 - 130	30	
Chrysene	ND	84	84	0.0	91	91	0.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	95	93	2.1	84	91	8.0	30 - 130	30	
Dibenzofuran	ND	83	83	0.0	87	88	1.1	30 - 130	30	
Diethyl phthalate	ND	86	88	2.3	90	92	2.2	30 - 130	30	
Dimethylphthalate	ND	85	84	1.2	89	90	1.1	30 - 130	30	
Di-n-butylphthalate	ND	82	82	0.0	87	89	2.3	30 - 130	30	
Di-n-octylphthalate	ND	85	86	1.2	95	99	4.1	30 - 130	30	
Fluoranthene	ND	86	85	1.2	94	94	0.0	30 - 130	30	
Fluorene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Hexachlorobenzene	ND	82	82	0.0	89	89	0.0	30 - 130	30	
Hexachlorobutadiene	ND	81	78	3.8	81	81	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	85	81	4.8	63	34	59.8	30 - 130	30	r
Hexachloroethane	ND	80	75	6.5	79	78	1.3	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Isophorone	ND	83	82	1.2	87	89	2.3	30 - 130	30	
Naphthalene	ND	78	97	21.7	81	82	1.2	30 - 130	30	
Nitrobenzene	ND	79	79	0.0	86	87	1.2	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
N-Nitrosodimethylamine	ND	83	75	10.1	84	80	4.9	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	81	77	5.1	85	79	7.3	30 - 130	30	
N-Nitrosodiphenylamine	ND	108	107	0.9	111	112	0.9	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	27	26	3.8	87	84	3.5	30 - 130	30	l
Phenanthrene	ND	85	85	0.0	94	94	0.0	30 - 130	30	
Phenol	ND	80	81	1.2	87	87	0.0	30 - 130	30	
Pyrene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Pyridine	ND	63	65	3.1	67	68	1.5	30 - 130	30	
% 2,4,6-Tribromophenol	73	84	82	2.4	99	101	2.0	15 - 130	30	
% 2-Fluorobiphenyl	65	78	78	0.0	82	83	1.2	30 - 130	30	
% 2-Fluorophenol	64	76	77	1.3	83	83	0.0	15 - 130	30	
% Nitrobenzene-d5	69	80	80	0.0	87	87	0.0	30 - 130	30	
% Phenol-d5	66	79	80	1.3	86	85	1.2	15 - 130	30	
% Terphenyl-d14	76	90	89	1.1	91	91	0.0	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201947, QC Sample No: BB91147 (BB91412)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	96	99	3.1	93	89	4.4	70 - 130	30	
1,1,1-Trichloroethane	ND	95	118	21.6	93	110	16.7	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	95	100	5.1	104	104	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	100	102	2.0	98	92	6.3	70 - 130	30	
1,1-Dichloroethane	ND	95	122	24.9	92	113	20.5	70 - 130	30	
1,1-Dichloroethene	ND	113	109	3.6	112	107	4.6	70 - 130	30	
1,1-Dichloropropene	ND	89	122	31.3	90	84	6.9	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	94	103	9.1	92	106	14.1	70 - 130	30	
1,2,3-Trichloropropane	ND	114	121	6.0	111	113	1.8	70 - 130	30	
1,2,4-Trichlorobenzene	ND	92	94	2.2	98	104	5.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	109	109	0.0	110	105	4.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	90	99	9.5	83	91	9.2	70 - 130	30	
1,2-Dibromoethane	ND	95	95	0.0	96	92	4.3	70 - 130	30	
1,2-Dichlorobenzene	ND	98	96	2.1	100	99	1.0	70 - 130	30	
1,2-Dichloroethane	ND	93	96	3.2	96	91	5.3	70 - 130	30	
1,2-Dichloropropane	ND	100	101	1.0	100	94	6.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	111	109	1.8	112	105	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	98	95	3.1	102	97	5.0	70 - 130	30	
1,3-Dichloropropane	ND	100	104	3.9	101	95	6.1	70 - 130	30	
1,4-Dichlorobenzene	ND	100	96	4.1	104	99	4.9	70 - 130	30	
2,2-Dichloropropane	ND	94	115	20.1	86	103	18.0	70 - 130	30	
2-Chlorotoluene	ND	101	97	4.0	104	96	8.0	70 - 130	30	
2-Hexanone	ND	60	68	12.5	43	45	4.5	70 - 130	30	l,m
2-Isopropyltoluene	ND	112	108	3.6	108	102	5.7	70 - 130	30	
4-Chlorotoluene	ND	103	100	3.0	109	103	5.7	70 - 130	30	
4-Methyl-2-pentanone	ND	80	87	8.4	75	79	5.2	70 - 130	30	
Acetone	ND	95	104	9.0	46	40	14.0	70 - 130	30	m
Acrylonitrile	ND	87	121	32.7	83	113	30.6	70 - 130	30	r
Benzene	ND	101	103	2.0	102	97	5.0	70 - 130	30	
Bromobenzene	ND	103	101	2.0	106	99	6.8	70 - 130	30	
Bromochloromethane	ND	86	120	33.0	85	118	32.5	70 - 130	30	r
Bromodichloromethane	ND	95	95	0.0	94	90	4.3	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromoform	ND	148	>150	NC	141	139	1.4	70 - 130	30	l,m
Bromomethane	ND	137	122	11.6	81	71	13.2	70 - 130	30	l
Carbon Disulfide	ND	108	105	2.8	95	90	5.4	70 - 130	30	
Carbon tetrachloride	ND	91	107	16.2	83	102	20.5	70 - 130	30	
Chlorobenzene	ND	102	100	2.0	105	98	6.9	70 - 130	30	
Chloroethane	ND	125	115	8.3	84	44	62.5	70 - 130	30	m,r
Chloroform	ND	93	119	24.5	90	111	20.9	70 - 130	30	
Chloromethane	ND	100	103	3.0	95	97	2.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	124	31.8	87	119	31.1	70 - 130	30	r
cis-1,3-Dichloropropene	ND	93	96	3.2	92	90	2.2	70 - 130	30	
Dibromochloromethane	ND	95	97	2.1	88	87	1.1	70 - 130	30	
Dibromomethane	ND	95	99	4.1	96	92	4.3	70 - 130	30	
Dichlorodifluoromethane	ND	110	93	16.7	102	91	11.4	70 - 130	30	
Ethylbenzene	ND	106	100	5.8	107	97	9.8	70 - 130	30	
Hexachlorobutadiene	ND	99	93	6.3	102	105	2.9	70 - 130	30	
Isopropylbenzene	ND	119	113	5.2	119	109	8.8	70 - 130	30	
m&p-Xylene	ND	111	106	4.6	113	102	10.2	70 - 130	30	
Methyl ethyl ketone	ND	69	94	30.7	<40	46	NC	70 - 130	30	l,m,r
Methyl t-butyl ether (MTBE)	ND	106	111	4.6	101	101	0.0	70 - 130	30	
Methylene chloride	ND	105	106	0.9	103	101	2.0	70 - 130	30	
Naphthalene	ND	100	116	14.8	94	111	16.6	70 - 130	30	
n-Butylbenzene	ND	106	100	5.8	110	103	6.6	70 - 130	30	
n-Propylbenzene	ND	104	97	7.0	111	101	9.4	70 - 130	30	
o-Xylene	ND	106	102	3.8	103	97	6.0	70 - 130	30	
p-Isopropyltoluene	ND	110	104	5.6	108	101	6.7	70 - 130	30	
sec-Butylbenzene	ND	110	104	5.6	115	105	9.1	70 - 130	30	
Styrene	ND	140	135	3.6	137	123	10.8	70 - 130	30	l,m
tert-Butylbenzene	ND	106	100	5.8	106	99	6.8	70 - 130	30	
Tetrachloroethene	ND	101	98	3.0	NC	NC	NC	70 - 130	30	
Tetrahydrofuran (THF)	ND	82	111	30.1	83	105	23.4	70 - 130	30	
Toluene	ND	102	101	1.0	103	94	9.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	109	2.7	110	107	2.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	94	96	2.1	95	93	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	104	5.9	87	86	1.2	70 - 130	30	
Trichloroethene	ND	102	100	2.0	100	92	8.3	70 - 130	30	
Trichlorofluoromethane	ND	125	121	3.3	108	102	5.7	70 - 130	30	
Trichlorotrifluoroethane	ND	117	111	5.3	113	104	8.3	70 - 130	30	
Vinyl chloride	ND	117	112	4.4	106	98	7.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	97	100	3.0	98	99	1.0	70 - 130	30	
% Bromofluorobenzene	91	92	89	3.3	93	90	3.3	70 - 130	30	
% Dibromofluoromethane	119	82	125	41.5	79	125	45.1	70 - 130	30	r
% Toluene-d8	99	99	99	0.0	100	96	4.1	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201972, QC Sample No: BB91269 (BB91414)

Volatiles - Water

1,1,1,2-Tetrachloroethane	ND	90	95	5.4	94	94	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	97	104	7.0	105	101	3.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	122	118	3.3	120	115	4.3	70 - 130	30	
1,1,2-Trichloroethane	ND	105	105	0.0	104	100	3.9	70 - 130	30	
1,1-Dichloroethane	ND	102	109	6.6	110	105	4.7	70 - 130	30	
1,1-Dichloroethene	ND	88	94	6.6	101	96	5.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	109	116	6.2	116	109	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	114	112	1.8	102	101	1.0	70 - 130	30	
1,2,3-Trichloropropane	ND	106	106	0.0	107	107	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	111	111	0.0	105	102	2.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	108	111	2.7	109	103	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	110	108	1.8	102	98	4.0	70 - 130	30	
1,2-Dibromoethane	ND	105	104	1.0	106	101	4.8	70 - 130	30	
1,2-Dichlorobenzene	ND	93	93	0.0	93	90	3.3	70 - 130	30	
1,2-Dichloroethane	ND	121	123	1.6	128	121	5.6	70 - 130	30	
1,2-Dichloropropane	ND	108	113	4.5	113	107	5.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	108	105	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	103	100	3.0	70 - 130	30	
1,3-Dichloropropane	ND	125	121	3.3	120	118	1.7	70 - 130	30	
1,4-Dichlorobenzene	ND	77	83	7.5	85	83	2.4	70 - 130	30	
2,2-Dichloropropane	ND	65	68	4.5	54	51	5.7	70 - 130	30	l,m
2-Chlorotoluene	ND	111	111	0.0	111	106	4.6	70 - 130	30	
2-Hexanone	ND	133	127	4.6	124	122	1.6	70 - 130	30	l
2-Isopropyltoluene	ND	99	104	4.9	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	105	107	1.9	109	104	4.7	70 - 130	30	
4-Methyl-2-pentanone	ND	118	113	4.3	109	107	1.9	70 - 130	30	
Acetone	ND	125	111	11.9	124	122	1.6	70 - 130	30	
Acrylonitrile	ND	111	113	1.8	112	101	10.3	70 - 130	30	
Benzene	ND	106	112	5.5	112	105	6.5	70 - 130	30	
Bromobenzene	ND	115	117	1.7	114	108	5.4	70 - 130	30	
Bromochloromethane	ND	96	100	4.1	101	97	4.0	70 - 130	30	
Bromodichloromethane	ND	102	106	3.8	109	103	5.7	70 - 130	30	
Bromoform	ND	76	75	1.3	76	75	1.3	70 - 130	30	
Bromomethane	ND	41	62	40.8	84	87	3.5	70 - 130	30	l,r
Carbon Disulfide	ND	89	96	7.6	98	94	4.2	70 - 130	30	
Carbon tetrachloride	ND	102	107	4.8	113	107	5.5	70 - 130	30	
Chlorobenzene	ND	77	83	7.5	86	83	3.6	70 - 130	30	
Chloroethane	ND	90	101	11.5	115	103	11.0	70 - 130	30	
Chloroform	ND	101	104	2.9	108	103	4.7	70 - 130	30	
Chloromethane	ND	89	95	6.5	116	111	4.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	96	103	7.0	100	97	3.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Dibromochloromethane	ND	116	112	3.5	115	109	5.4	70 - 130	30	
Dibromomethane	ND	101	108	6.7	112	107	4.6	70 - 130	30	
Dichlorodifluoromethane	ND	67	71	5.8	108	105	2.8	70 - 130	30	l
Ethylbenzene	ND	69	74	7.0	73	71	2.8	70 - 130	30	l
Hexachlorobutadiene	ND	99	104	4.9	91	93	2.2	70 - 130	30	
Isopropylbenzene	ND	105	109	3.7	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	77	81	5.1	81	79	2.5	70 - 130	30	
Methyl ethyl ketone	ND	96	101	5.1	123	124	0.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	110	106	3.7	70 - 130	30	
Methylene chloride	ND	79	83	4.9	85	82	3.6	70 - 130	30	
Naphthalene	ND	127	124	2.4	116	115	0.9	70 - 130	30	
n-Butylbenzene	ND	106	109	2.8	104	101	2.9	70 - 130	30	
n-Propylbenzene	ND	95	98	3.1	99	96	3.1	70 - 130	30	
o-Xylene	ND	78	80	2.5	80	77	3.8	70 - 130	30	
p-Isopropyltoluene	ND	110	115	4.4	106	104	1.9	70 - 130	30	
sec-Butylbenzene	ND	99	103	4.0	103	100	3.0	70 - 130	30	
Styrene	ND	69	71	2.9	68	67	1.5	70 - 130	30	l,m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
tert-Butylbenzene	ND	106	109	2.8	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	106	111	4.6	110	106	3.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	117	123	5.0	117	118	0.9	70 - 130	30	
Toluene	ND	97	102	5.0	100	94	6.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	92	99	7.3	102	97	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	95	1.0	94	88	6.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	90	13.5	90	98	8.5	70 - 130	30	
Trichloroethene	ND	96	102	6.1	100	94	6.2	70 - 130	30	
Trichlorofluoromethane	ND	97	107	9.8	111	105	5.6	70 - 130	30	
Trichlorotrifluoroethane	ND	80	89	10.7	86	84	2.4	70 - 130	30	
Vinyl chloride	ND	86	94	8.9	110	105	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	104	101	2.9	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	103	118	117	0.9	117	118	0.9	70 - 130	30	
% Dibromofluoromethane	88	88	89	1.1	88	89	1.1	70 - 130	30	
% Toluene-d8	102	102	103	1.0	102	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201678, QC Sample No: BB91410 (BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	66	72	8.7	92	78	16.5	50 - 150	30	
% n-Pentacosane	71	77	81	5.1	99	86	14.1	50 - 150	30	

QA/QC Batch 201943, QC Sample No: BB91644 (BB91404, BB91405, BB91406)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	104	102	1.9	99	104	4.9	70 - 130	30	
1,1,1-Trichloroethane	ND	101	98	3.0	99	115	15.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	90	84	6.9	95	100	5.1	70 - 130	30	
1,1,2-Trichloroethane	ND	103	97	6.0	100	105	4.9	70 - 130	30	
1,1-Dichloroethane	ND	98	117	17.7	97	130	29.1	70 - 130	30	
1,1-Dichloroethene	ND	100	93	7.3	98	107	8.8	70 - 130	30	
1,1-Dichloropropene	ND	96	94	2.1	97	110	12.6	70 - 130	30	
1,2,3-Trichlorobenzene	ND	82	92	11.5	87	102	15.9	70 - 130	30	
1,2,3-Trichloropropane	ND	112	87	25.1	103	91	12.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	74	81	9.0	86	99	14.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	89	91	2.2	96	101	5.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	111	105	5.6	94	103	9.1	70 - 130	30	
1,2-Dibromoethane	ND	104	96	8.0	99	104	4.9	70 - 130	30	
1,2-Dichlorobenzene	ND	90	88	2.2	95	99	4.1	70 - 130	30	
1,2-Dichloroethane	ND	102	97	5.0	99	106	6.8	70 - 130	30	
1,2-Dichloropropane	ND	100	98	2.0	100	103	3.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	91	93	2.2	96	100	4.1	70 - 130	30	
1,3-Dichlorobenzene	ND	87	87	0.0	95	101	6.1	70 - 130	30	
1,3-Dichloropropane	ND	100	94	6.2	97	101	4.0	70 - 130	30	
1,4-Dichlorobenzene	ND	84	84	0.0	94	99	5.2	70 - 130	30	
2,2-Dichloropropane	ND	90	95	5.4	90	110	20.0	70 - 130	30	
2-Chlorotoluene	ND	93	91	2.2	95	101	6.1	70 - 130	30	
2-Hexanone	ND	67	69	2.9	53	55	3.7	70 - 130	30	l,m
2-Isopropyltoluene	ND	93	97	4.2	98	103	5.0	70 - 130	30	
4-Chlorotoluene	ND	89	86	3.4	95	100	5.1	70 - 130	30	
4-Methyl-2-pentanone	ND	96	90	6.5	91	95	4.3	70 - 130	30	
Acetone	ND	75	80	6.5	<40	<40	NC	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acrylonitrile	ND	102	117	13.7	98	138	33.9	70 - 130	30	m,r
Benzene	ND	99	98	1.0	98	106	7.8	70 - 130	30	
Bromobenzene	ND	97	95	2.1	94	102	8.2	70 - 130	30	
Bromochloromethane	ND	98	93	5.2	96	112	15.4	70 - 130	30	
Bromodichloromethane	ND	105	99	5.9	98	105	6.9	70 - 130	30	
Bromoform	ND	114	104	9.2	95	104	9.0	70 - 130	30	
Bromomethane	ND	93	90	3.3	44	57	25.7	70 - 130	30	m
Carbon Disulfide	ND	102	97	5.0	92	101	9.3	70 - 130	30	
Carbon tetrachloride	ND	106	98	7.8	95	113	17.3	70 - 130	30	
Chlorobenzene	ND	95	92	3.2	98	101	3.0	70 - 130	30	
Chloroethane	ND	103	92	11.3	<40	<40	NC	70 - 130	30	m
Chloroform	ND	98	97	1.0	97	115	17.0	70 - 130	30	
Chloromethane	ND	95	85	11.1	84	92	9.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	95	96	1.0	95	118	21.6	70 - 130	30	
cis-1,3-Dichloropropene	ND	98	94	4.2	93	99	6.3	70 - 130	30	
Dibromochloromethane	ND	107	100	6.8	94	99	5.2	70 - 130	30	
Dibromomethane	ND	103	97	6.0	99	104	4.9	70 - 130	30	
Dichlorodifluoromethane	ND	98	84	15.4	76	90	16.9	70 - 130	30	
Ethylbenzene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
Hexachlorobutadiene	ND	84	93	10.2	94	107	12.9	70 - 130	30	
Isopropylbenzene	ND	95	95	0.0	96	104	8.0	70 - 130	30	
m&p-Xylene	ND	93	94	1.1	100	102	2.0	70 - 130	30	
Methyl ethyl ketone	ND	75	76	1.3	47	55	15.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	96	114	17.1	91	124	30.7	70 - 130	30	r
Methylene chloride	ND	93	91	2.2	93	104	11.2	70 - 130	30	
Naphthalene	ND	89	109	20.2	82	114	32.7	70 - 130	30	r
n-Butylbenzene	ND	80	88	9.5	94	101	7.2	70 - 130	30	
n-Propylbenzene	ND	91	88	3.4	96	103	7.0	70 - 130	30	
o-Xylene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
p-Isopropyltoluene	ND	87	94	7.7	98	103	5.0	70 - 130	30	
sec-Butylbenzene	ND	92	91	1.1	98	104	5.9	70 - 130	30	
Styrene	ND	93	95	2.1	101	103	2.0	70 - 130	30	
tert-Butylbenzene	ND	96	95	1.0	98	104	5.9	70 - 130	30	
Tetrachloroethene	ND	94	93	1.1	100	102	2.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	91	10.4	95	107	11.9	70 - 130	30	
Toluene	ND	99	98	1.0	99	104	4.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	86	103	18.0	86	117	30.5	70 - 130	30	
trans-1,3-Dichloropropene	ND	99	95	4.1	93	102	9.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	92	96	4.3	79	90	13.0	70 - 130	30	
Trichloroethene	ND	107	103	3.8	96	102	6.1	70 - 130	30	
Trichlorofluoromethane	ND	105	101	3.9	<40	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	100	100	0.0	104	113	8.3	70 - 130	30	
Vinyl chloride	ND	97	91	6.4	80	86	7.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	100	100	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	97	101	101	0.0	103	101	2.0	70 - 130	30	
% Dibromofluoromethane	96	100	99	1.0	96	108	11.8	70 - 130	30	
% Toluene-d8	105	101	101	0.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201689, QC Sample No: BB91709 (BB91404)

Chlorinated Herbicides - Soil

2,4,5-T	ND	43			39	38	2.6	40 - 140	30

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2,4,5-TP (Silvex)	ND	42			40	40	0.0	40 - 140	30
2,4-D	ND	48			46	46	0.0	40 - 140	30
2,4-DB	ND	36			34	34	0.0	40 - 140	30
Dalapon	ND	43			44	45	2.2	40 - 140	30
Dicamba	ND	46			47	46	2.2	40 - 140	30
Dichloroprop	ND	43			39	41	5.0	40 - 140	30
Dinoseb	ND	42			43	44	2.3	40 - 140	30
% DCAA (Surrogate Rec)	70	41			40	41	2.5	30 - 150	30

QA/QC Batch 201677, QC Sample No: BB91709 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Pesticides - Soil

4,4' -DDD	ND	88	86	2.3	89	79	11.9	40 - 140	30
4,4' -DDE	ND	74	79	6.5	83	71	15.6	40 - 140	30
4,4' -DDT	ND	76	77	1.3	79	75	5.2	40 - 140	30
a-BHC	ND	85	85	0.0	90	88	2.2	40 - 140	30
a-Chlordane	ND	86	85	1.2	89	84	5.8	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	86	85	1.2	91	88	3.4	40 - 140	30
b-BHC	ND	83	83	0.0	83	81	2.4	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	85	84	1.2	83	82	1.2	40 - 140	30
Dieldrin	ND	88	88	0.0	93	87	6.7	40 - 140	30
Endosulfan I	ND	90	93	3.3	102	92	10.3	40 - 140	30
Endosulfan II	ND	66	66	0.0	88	82	7.1	40 - 140	30
Endosulfan sulfate	ND	81	73	10.4	91	88	3.4	40 - 140	30
Endrin	ND	94	93	1.1	96	92	4.3	40 - 140	30
Endrin aldehyde	ND	63	65	3.1	90	86	4.5	40 - 140	30
Endrin ketone	ND	89	89	0.0	95	90	5.4	40 - 140	30
g-BHC	ND	85	84	1.2	89	86	3.4	40 - 140	30
g-Chlordane	ND	83	81	2.4	84	80	4.9	40 - 140	30
Heptachlor	ND	87	87	0.0	90	89	1.1	40 - 140	30
Heptachlor epoxide	ND	85	84	1.2	90	83	8.1	40 - 140	30
Methoxychlor	ND	80	78	2.5	81	75	7.7	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	85	96	77	22.0	95	70	30.3	30 - 150	30
% TCMX	87	92	92	0.0	94	91	3.2	30 - 150	30

QA/QC Batch 201675, QC Sample No: BB91709 (BB91412, BB91413)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	88			70	87	21.7	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	89			74	94	23.8	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	63	77			61	79	25.7	30 - 150	30
% TCMX (Surrogate Rec)	49	72			63	79	22.5	30 - 150	30

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201949, QC Sample No: BB92323 (BB91407)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	103	97	6.0	100	97	3.0	70 - 130	30	
1,1,1-Trichloroethane	ND	94	100	6.2	119	94	23.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	106	107	0.9	105	105	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	101	97	4.0	98	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	92	115	22.2	123	122	0.8	70 - 130	30	
1,1-Dichloroethene	ND	113	107	5.5	117	120	2.5	70 - 130	30	
1,1-Dichloropropene	ND	91	83	9.2	129	92	33.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	110	112	1.8	104	102	1.9	70 - 130	30	
1,2,3-Trichloropropane	ND	123	125	1.6	121	115	5.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	108	105	2.8	103	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	119	111	7.0	117	115	1.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	110	4.7	89	91	2.2	70 - 130	30	
1,2-Dibromoethane	ND	96	94	2.1	96	93	3.2	70 - 130	30	
1,2-Dichlorobenzene	ND	106	98	7.8	102	106	3.8	70 - 130	30	
1,2-Dichloroethane	ND	95	91	4.3	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	100	95	5.1	100	99	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	121	113	6.8	115	116	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	109	98	10.6	108	110	1.8	70 - 130	30	
1,3-Dichloropropane	ND	105	101	3.9	104	103	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	108	100	7.7	113	112	0.9	70 - 130	30	
2,2-Dichloropropane	ND	94	112	17.5	115	91	23.3	70 - 130	30	
2-Chlorotoluene	ND	110	99	10.5	103	107	3.8	70 - 130	30	
2-Hexanone	ND	67	78	15.2	49	48	2.1	70 - 130	30	l,m
2-Isopropyltoluene	ND	121	109	10.4	117	118	0.9	70 - 130	30	
4-Chlorotoluene	ND	114	103	10.1	119	117	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	82	87	5.9	84	78	7.4	70 - 130	30	
Acetone	ND	91	97	6.4	44	<40	NC	70 - 130	30	m
Acrylonitrile	ND	83	119	35.6	119	110	7.9	70 - 130	30	r
Benzene	ND	105	97	7.9	104	102	1.9	70 - 130	30	
Bromobenzene	ND	113	103	9.3	101	105	3.9	70 - 130	30	
Bromochloromethane	ND	82	115	33.5	121	84	36.1	70 - 130	30	r
Bromodichloromethane	ND	100	90	10.5	95	93	2.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	130	112	14.9	79	96	19.4	70 - 130	30	
Carbon Disulfide	ND	109	104	4.7	103	105	1.9	70 - 130	30	
Carbon tetrachloride	ND	95	110	14.6	111	90	20.9	70 - 130	30	
Chlorobenzene	ND	108	100	7.7	108	111	2.7	70 - 130	30	
Chloroethane	ND	121	109	10.4	<40	<40	NC	70 - 130	30	m
Chloroform	ND	90	111	20.9	118	91	25.8	70 - 130	30	
Chloromethane	ND	97	98	1.0	109	105	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	122	33.5	125	87	35.8	70 - 130	30	r
cis-1,3-Dichloropropene	ND	96	91	5.3	96	95	1.0	70 - 130	30	
Dibromochloromethane	ND	103	99	4.0	98	94	4.2	70 - 130	30	
Dibromomethane	ND	100	93	7.3	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	82	29.2	117	128	9.0	70 - 130	30	
Ethylbenzene	ND	112	101	10.3	109	113	3.6	70 - 130	30	
Hexachlorobutadiene	ND	112	101	10.3	105	110	4.7	70 - 130	30	
Isopropylbenzene	ND	126	115	9.1	120	128	6.5	70 - 130	30	
m&p-Xylene	ND	117	105	10.8	120	122	1.7	70 - 130	30	
Methyl ethyl ketone	ND	65	74	12.9	57	<40	NC	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	109	105	3.7	109	102	6.6	70 - 130	30	
Methylene chloride	ND	105	99	5.9	111	111	0.0	70 - 130	30	
Naphthalene	ND	105	125	17.4	110	102	7.5	70 - 130	30	
n-Butylbenzene	ND	119	108	9.7	114	118	3.4	70 - 130	30	
n-Propylbenzene	ND	113	103	9.3	108	117	8.0	70 - 130	30	
o-Xylene	ND	108	101	6.7	110	109	0.9	70 - 130	30	
p-Isopropyltoluene	ND	120	108	10.5	112	116	3.5	70 - 130	30	
sec-Butylbenzene	ND	120	108	10.5	117	123	5.0	70 - 130	30	
Styrene	ND	146	130	11.6	144	>150	NC	70 - 130	30	l,m
tert-Butylbenzene	ND	113	103	9.3	105	112	6.5	70 - 130	30	
Tetrachloroethene	ND	105	99	5.9	112	125	11.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	111	26.5	109	84	25.9	70 - 130	30	
Toluene	ND	103	96	7.0	103	104	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	107	4.6	116	115	0.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	93	4.2	96	93	3.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	112	0.0	97	95	2.1	70 - 130	30	
Trichloroethene	ND	101	94	7.2	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	123	117	5.0	82	91	10.4	70 - 130	30	
Trichlorotrifluoroethane	ND	116	111	4.4	116	120	3.4	70 - 130	30	
Vinyl chloride	ND	115	106	8.1	101	106	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	98	100	2.0	94	96	2.1	70 - 130	30	
% Bromofluorobenzene	91	92	91	1.1	90	93	3.3	70 - 130	30	
% Dibromofluoromethane	123	83	127	41.9	123	81	41.2	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 17, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91404	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2500	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	51.0	0.77	10	10	mg/Kg
BB91406	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	4950	39	400	400	mg/Kg
BB91407	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	19.2	0.76	10	10	mg/Kg
BB91407	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	3130	38	400	400	mg/Kg
BB91407	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.50	0.010	0.15	0.15	mg/L
BB91407	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	5.06	0.10	0.15	0.15	mg/L
BB91407	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	EPA	40 Cfr 261.24	Toxicity Characteristics	5.06	0.10	5	5	mg/L
BB91408	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91408	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1880	36	400	400	mg/Kg
BB91408	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.444	0.010	0.15	0.15	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91409	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	8100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	114	0.86	10	10	mg/Kg
BB91409	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	5730	43	400	400	mg/Kg
BB91409	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	14.8	0.10	0.15	0.15	mg/L
BB91409	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	EPA	40 Cfr 261.24	Toxicity Characteristics	14.8	0.10	5	5	mg/L
BB91410	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	19.1	0.72	10	10	mg/Kg
BB91411	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	140	140	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6000	1200	1200	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	400	400	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3300	2800	2800	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3300	1650	1650	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1400	1400	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	3100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	15000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	330	330	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	910	25	500	500	mg/Kg
BB91411	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	33.9	0.77	10	10	mg/Kg
BB91411	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20700	390	400	400	mg/Kg
BB91411	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.15	0.010	0.15	0.15	mg/L
BB91411	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	38.2	1.0	0.15	0.15	mg/L
BB91411	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	EPA	40 Cfr 261.24	Toxicity Characteristics	38.2	1.0	5	5	mg/L
BB91412	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	140	140	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	2400	2400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	11000	1200	1200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	400	400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	4-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	2800	2800	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	1650	1650	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	6300	4100	4100	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	5900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	110000	2700	56000	56000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	110000	2700	40000	40000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	51000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	330	330	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	20000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	20000	2700	8400	8400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	23	13	13	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor epoxide	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	37	20	20	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	12	7	7	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Chlordane	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	120	66	66	ug/Kg
BB91412	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	11.4	0.78	10	10	mg/Kg
BB91412	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1400	3.9	400	400	mg/Kg
BB91412	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.756	0.010	0.15	0.15	mg/L
BB91412	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.87	0.10	0.15	0.15	mg/L
BB91413	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	140	140	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	2400	2400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	12000	1200	1200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	400	400	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91413	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	4-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	2800	2800	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	1650	1650	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	6500	4100	4100	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	6100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	21000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	330	330	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	9300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	9300	2800	8400	8400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	16000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	16000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	1200	60	500	500	mg/Kg
BB91413	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	28.0	0.83	10	10	mg/Kg
BB91413	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	14600	42	400	400	mg/Kg
BB91413	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	3.22	0.10	0.15	0.15	mg/L
BB91413	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	44.7	1.0	0.15	0.15	mg/L
BB91413	MAGU-DAS	TCLP-PB	TCLP Lead	mg/l	EPA	40 Cfr 261.24	Toxicity Characteristics	44.7	1.0	5	5	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413, BB91414

Sampling Date(s): 5/29/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: PCB Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Sunday, June 17, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine reporting levels do not meet GBPM criteria.

Not all constituents met requested criteria due to the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/31/12-1 (BB91404, BB91408, BB91410)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Instrument: Au-fid1 06/01/12-2 (BB91405, BB91413)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 05/31/12-1 (BB91412)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Instrument: Au-xl1 06/01/12-2 (BB91406, BB91407, BB91409, BB91411)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

QC (Site Specific)

---------- Sample No: BB91410, QA/QC Batch: 201678 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB90759, QA/QC Batch: 201579 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/31/12-1 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Initial Calibration ECD14-061712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

QC (Batch Specific)

---------- Sample No: BB91037, QA/QC Batch: 201601 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201689 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(36%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/31/2012

Instrument: Merlin 06/01/12-1 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	6/1/2012

QC (Site Specific)

---------- Sample No: BB91409, QA/QC Batch: 201811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91030, QA/QC Batch: 201720 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91197, QA/QC Batch: 201722 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/31/2012

Instrument: Icp10 06/01/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/01/12-1 (BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/04/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/4/2012

Instrument: Icp9 06/14/12-1 (BB91407, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/14/2012

QC (Batch Specific)

---------- Sample No: BB90808, QA/QC Batch: 201639 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91705, QA/QC Batch: 201676 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB97075, QA/QC Batch: 202564 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB97989, QA/QC Batch: 202680 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201595 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411): -----

The LCS and/or the LCSD recovery is below range. A low bias is possible. (PCB-1016, PCB-1260)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Instrument: Au-ecd8 05/29/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/29/2012

QC (Batch Specific)

---------- Sample No: BB90234, QA/QC Batch: 201595 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: PCB-1016(35%), PCB-1260(34%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201675 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91410, BB91411, BB91413)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/31/2012

Instrument: Au-ecd4 06/04/12-1 (BB91412)

8081 Narration:

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/4/2012

QC (Batch Specific)

---------- Sample No: BB91709, QA/QC Batch: 201677 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201594 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413): -----

The LCS/LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pentachlorophenol)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, 4-Chloroaniline, Aniline, Pentachloronitrobenzene)

Instrument: Chem09 05/31/12-1 (BB91404, BB91405, BB91406, BB91409, BB91410)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, Bis(2-chloroisopropyl)ether, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Bis(2-ethylhexyl)phthalate, 3,3'-dichlorobenzidine

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Printed Name Damien Drobinski
Position: Chemist
Date: 5/31/2012

Instrument: Chem09 06/01/12-2 (BB91411, BB91412, BB91413)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration:

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

Instrument: Chem09 06/03/12-1 (BB91407, BB91412)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Chem09 06/05/12-1 (BB91408)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate

Printed Name Damien Drobinski
Position: Chemist
Date: 6/5/2012

Instrument: Chem12 06/03/12-1 (BB91409)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0603):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 3&4-methylphenol (m&p-cresol), 2-nitrophenol, 2-nitroaniline, 4,6-dinitro-2-methylphenol, Benzyl Butyl Phthalate

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

QC (Batch Specific)

---------- Sample No: BB91093, QA/QC Batch: 201594 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.5%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(27%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.2%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(26%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201943 (Samples: BB91404, BB91405, BB91406): -----

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2-Hexanone)

QC Batch 201947 (Samples: BB91412): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Methyl ethyl ketone, 2-Hexanone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (1,1-Dichloropropene, Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene, Methyl ethyl ketone, Tetrahydrofuran (THF))

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201949 (Samples: BB91407): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (2-Hexanone, Methyl ethyl ketone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201972 (Samples: BB91414): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (Styrene)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

significant bias is suspected. (2-Hexanone)

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichlorodifluoromethane, Ethylbenzene)

The LCS/LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Bromomethane)

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane)

Instrument: Chem03 05/31/12-2 (BB91404, BB91405, BB91406)

Initial Calibration Verification (RCPS_0531):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Methyl Ethyl Ketone, 2-hexanone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: 2-Hexanone

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem08 05/30/12-3 (BB91414)

S -Side
Initial Calibration(RCPS_0529:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, Trans-1,4-dichloro-2-butene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: trans-1,4-Dichloro-2-butene Bromomethane, 2,2-Dichloropropane, Tetrahydrofuran (THF), Styrene

Printed Name Tina Covensky
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/30/12-3 (BB91408, BB91409, BB91410, BB91411, BB91413)

Initial Calibration Verification (CHEM11/RCPS_0525A):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/31/12-2 (BB91412)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Chloroethane, Methyl Ethyl Ketone, 2-Hexanone, Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem11 06/01/12-1 (BB91407)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01972 06/04/12 (BB91414)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 17, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB91147, QA/QC Batch: 201947 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(60%), Bromoform(148%), Bromomethane(137%), Methyl ethyl ketone(69%), Styrene(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(68%), Bromoform(>150%), Styrene(135%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.5%), 1,1-Dichloropropene(31.3%), Acrylonitrile(32.7%), Bromochloromethane(33.0%), cis-1,2-Dichloroethene(31.8%), Methyl ethyl ketone(30.7%)

---------- Sample No: BB91269, QA/QC Batch: 201972 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%), 2-Hexanone(133%), Bromomethane(41%), Dichlorodifluoromethane(67%), Ethylbenzene(69%), Styrene(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Bromomethane(62%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromomethane(40.8%)

---------- Sample No: BB91644, QA/QC Batch: 201943 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(69%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92323, QA/QC Batch: 201949 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%), Bromoform(>150%), Methyl ethyl ketone(65%), Styrene(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.9%), Acrylonitrile(35.6%), Bromochloromethane(33.5%), cis-1,2-Dichloroethene(33.5%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

6° w/c + IP

CHAIN OF CUSTODY RECORD

Temp

Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-29-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SGLP RCRA 8 Metals	Soil VOA Vials (1 methanol 2 H2O)	GL Soil container (6) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2'-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X	2	2								
91405	GP-10 1'-3'			10:15am								3									
91406	GP-11 1'-3'			10:51am																	
91407	GP-12 1'-3'			11:14am																	
91408	GP-13 1'-3'			11:54am																	
91409	GP-14 1'-3'			12:11pm																	
91410	GP-15 1'-3'			12:43pm																	
91411	GP-20 1'-3'			12:55																	
91412	GP-21 1'-3'			1:20pm																	
91413	GP-22 1'-3'			1:49pm																	
91414	TB-15	GW		—											2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/30/12	11:30
[signature]	Caleb Githinji		
Caleb Githinji	Aparadise	5/30/12	1520

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

6° w/c + IP

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: PAS Contract - CDOT c/o MET

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Sampler's Signature: [signature] Date: 5-29-12

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request:

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT EPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SCL RCRA 8 Metals	TCLP Lead	Soil VOA Vials (1) methanol (2) H2O	GL Soil container (3) 1 oz	GL Soil container ( ) 1 oz	40 ml VOA Vial ( ) As is ( ) HCl	GL Amber 1000ml ( ) As is ( ) H2SO4	PL As is ( ) 250ml ( ) 500ml ( ) 1000ml	PL H2SO4 ( ) 250ml ( ) 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2'-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X						2	2				
91405	GP-10 1'-3'			10:15am													3					
91406	GP-11 1'-3'			10:51am																		
91407	GP-12 1'-3'			11:14am								X										
91408	GP-13 1'-3'			11:54am																		
91409	GP-14 1'-3'			12:11pm								X										
91410	GP-15 1'-3'			12:43pm																		
91411	GP-20 1'-3'			12:55								X										
91412	GP-21 1'-3'			1:20pm																		
91413	GP-22 1'-3'			1:49pm								X										
91414	TB-15	GW		—												2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/30/12	11:30
[signature]	Caleb Githinji		
Caleb Githinji	Paracelsus	5/30/12	1520

Comments, Special Requirements or Regulations:
Additional Analysis per J. Witherell 6/13/12

Turnaround:
☐ 1 Day*
☐ 2 Days*
☒ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

Linda - Phoenixlabs

From: Jane Witherell [JWitherell@maguiregroup.com]
Sent: Wednesday, June 13, 2012 11:49 AM
To: Linda - Phoenixlabs
Cc: David Stock
Subject: Additional Analysis Request - MN Catenary Project
Attachments: COC_Additional Analysis_061312.pdf

Linda,

Attached is the COC for the additional analysis (TCLP Lead) for the marked soil samples.

Thanks,
Jane

Jane Witherell, PE, LEP, CHMM
Principal Engineer
MAGUIRE GROUP INC.

2080 Silas Deane Highway
Rocky Hill, CT 06067
860.224.9141 - Ext. 3012
860.224.9147 Fax
jwitherell@maguiregroup.com
www.maguiregroup.com

Attention: The information contained in this E-mail message is privileged and confidential information intended only for the use of the individual(s) named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please contact the sender by reply E-mail and destroy all copies of the original message. Thank you.

PHOENIX
Environmental Laboratories, Inc.

Friday, June 22, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB91853, BB91855 - BB91856, BB91858, BB91862 - BB91863

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	10:43
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91853

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-24 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.50	0.50	mg/Kg	06/01/12		LK	SW6010
Arsenic	76.6	0.99	mg/Kg	06/04/12		EK	SW6010
Barium	90.8	0.50	mg/Kg	06/01/12		LK	SW6010
Cadmium	< 0.50	0.50	mg/Kg	06/01/12		LK	SW6010
Chromium	26.5	0.50	mg/Kg	06/01/12		LK	SW6010
Mercury	0.33	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	1970	50	mg/Kg	06/04/12		EK	SW6010
Selenium	< 2.0	2.0	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	0.005	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	0.012	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.071	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	0.55	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	68		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	600	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	60	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	120	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	60	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	120	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	129		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	1000	28	mg/Kg	06/04/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	132		%	06/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	480	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	71		%	06/02/12		MH	30 - 150 %
% TCMX	47		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	46	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	46	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	46	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	23	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	20	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	66	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	7.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	23	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	46	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	46	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	7.2	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	13	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	230	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	230	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	48		%	06/04/12		KCA	30 - 150 %
% TCMX	48		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromoethane	ND	7.0	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	37	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	37	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	150	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	7.4	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	4.4	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	44	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	15	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	129		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	780	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	340	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	2900	340	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	490	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	330	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	490	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	3000	340	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	2200	340	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	11000	340	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	7900	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	13000	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	3300	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	2800	340	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	900	730	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	15000	340	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	1700	340	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	810	340	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	16000	340	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	3400	340	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	340	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	3300	340	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	340	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	6700	340	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	21000	340	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	86		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	70		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	76		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	78		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	77		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	60		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	11:31
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91855

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-26 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	06/01/12		LK	SW6010
Arsenic	25.6	0.80	mg/Kg	06/01/12		LK	SW6010
Barium	96.9	0.40	mg/Kg	06/01/12		LK	SW6010
Cadmium	< 0.40	0.40	mg/Kg	06/01/12		LK	SW6010
Chromium	31.7	0.40	mg/Kg	06/01/12		LK	SW6010
Mercury	0.17	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1910	40	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	0.100	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.193	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	2.78	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	86		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	480	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	96	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	96	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	98		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	420	11	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	126		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	64		%	06/02/12		MH	30 - 150 %
% TCMX	50		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	36	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	11	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	56		%	06/04/12		KCA	30 - 150 %
% TCMX	57		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromoethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	106		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	92		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	100		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	610	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1600	260	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	560	260	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	490	260	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1900	260	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	450	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1500	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	2600	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	790	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	840	260	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	570	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2400	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	370	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	530	260	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	3000	260	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	280	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	760	260	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	260	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	1400	260	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	3400	260	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2500	260	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	83		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	79		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	84		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	60		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	11:56
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91856

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-27 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	06/01/12		LK	SW6010
Arsenic	22.7	0.80	mg/Kg	06/01/12		LK	SW6010
Barium	97.2	0.40	mg/Kg	06/01/12		LK	SW6010
Cadmium	0.66	0.40	mg/Kg	06/01/12		LK	SW6010
Chromium	22.2	0.40	mg/Kg	06/01/12		LK	SW6010
Mercury	0.32	0.10	mg/Kg	06/01/12		RS	SW-7471
Lead	1150	4.0	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	0.013	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.090	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	0.22	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	79		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	520	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	52	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	52	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	112		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	380	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	117		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	420	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	68		%	06/02/12		MH	30 - 150 %
% TCMX	51		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	40	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	40	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	40	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	62	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	40	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	40	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	85		%	06/04/12		KCA	30 - 150 %
% TCMX	64		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromoethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	32	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	32	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	38	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	107		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	70		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	113		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	95		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1500	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1100	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	880	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	3300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	510	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	2700	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	2000	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	630	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	590	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	470	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	4900	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4100	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	67		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	74		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	06/01/12		KCA	15 - 130 %

Comments:

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	13:14
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91858

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-29 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.44	0.44	mg/Kg	06/01/12		LK	SW6010
Arsenic	20.8	0.88	mg/Kg	06/01/12		LK	SW6010
Barium	73.3	0.44	mg/Kg	06/01/12		LK	SW6010
Cadmium	0.59	0.44	mg/Kg	06/01/12		LK	SW6010
Chromium	16.5	0.44	mg/Kg	06/01/12		LK	SW6010
Mercury	0.13	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1360	44	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.8	1.8	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	0.016	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.016	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	1.20	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	111		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	220	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	68		%	06/01/12		MH	30 - 150 %
% TCMX	46		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	55		%	06/04/12		KCA	30 - 150 %
% TCMX	48		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromoethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	123	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	6	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	6	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	6	ug/Kg	06/04/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	4	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	6	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	6	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	6	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	88		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	73		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	103		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	930	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	700	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	410	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1300	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	2200	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	690	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	620	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2400	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	330	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	320	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	640	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	1000	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1900	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2300	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	96		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	77		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	82		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	80		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	79		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	67		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

8260 analysis comments:
Sample exhibited severe matrix interference. Both Low-level vials were analyzed with very poor internal standard response. The high level analysis did not exhibit this interference. Had any compounds been detected in the high level analysis, they would have been reported at that dilution. The low level analysis was reported, in order to meet the requested reporting criteria, the surrogate recoveries are from the high level analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
June 22, 2012
Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:19
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91862

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-33 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	06/01/12		EK	SW6010
Arsenic	22.7	0.83	mg/Kg	06/01/12		EK	SW6010
Barium	81.6	0.41	mg/Kg	06/01/12		EK	SW6010
Cadmium	0.75	0.41	mg/Kg	06/01/12		EK	SW6010
Chromium	22.2	0.41	mg/Kg	06/01/12		EK	SW6010
Mercury	0.29	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1300	41	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.064	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	0.36	0.10	mg/L	06/21/12		LK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	83		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	104		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	370	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	96		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	66		%	06/01/12		MH	30 - 150 %
% TCMX	51		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	83		%	06/04/12		KCA	30 - 150 %
% TCMX	57		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	06/06/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dibromoethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2,2-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2-Chlorotoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2-Hexanone	ND	30	ug/Kg	06/06/12		H/J	SW8260
2-Isopropyltoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
4-Chlorotoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	06/06/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/06/12		H/J	SW8260
Acrylonitrile	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Benzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromochloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromodichloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromoform	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromomethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Carbon Disulfide	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Carbon tetrachloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chloroform	ND	6.0	ug/Kg	06/06/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	06/06/12		H/J	SW8260
Dibromomethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Ethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Hexachlorobutadiene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Isopropylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
m&p-Xylene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	06/06/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/06/12		H/J	SW8260
Methylene chloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Naphthalene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
n-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
n-Propylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
o-Xylene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
p-Isopropyltoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
sec-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Styrene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
tert-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Tetrachloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/06/12		H/J	SW8260
Toluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Total Xylenes	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/06/12		H/J	SW8260
Trichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Trichlorofluoromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Vinyl chloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	06/06/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	06/06/12		H/J	70 - 130 %
% Dibromofluoromethane	119		%	06/06/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/06/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1500	270	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1200	270	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	940	270	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	4100	270	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	470	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	3000	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	5900	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1300	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	1800	270	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5800	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	560	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	450	270	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	5700	270	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1300	270	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	1400	270	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4000	270	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	6100	270	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	69		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	78		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	73		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:38
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91863

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-34 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		EK	SW6010
Arsenic	52.1	0.83	mg/Kg	06/01/12		EK	SW6010
Barium	78.6	0.42	mg/Kg	06/01/12		EK	SW6010
Cadmium	< 0.42	0.42	mg/Kg	06/01/12		EK	SW6010
Chromium	19.3	0.42	mg/Kg	06/01/12		EK	SW6010
Mercury	0.24	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1620	42	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Arsenic	0.009	0.004	mg/L	06/01/12		EK	SW6010
SPLP Barium	0.015	0.010	mg/L	06/01/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.106	0.010	mg/L	06/01/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	SW6010
TCLP Lead	0.53	0.10	mg/L	06/21/12		LK	SW6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/30/12		MAG	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	680	24	mg/Kg	06/04/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	87		%	06/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	06/01/12		MH	30 - 150 %
% TCMX	69		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	30	6.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	112		%	06/04/12		KCA	30 - 150 %
% TCMX	80		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromoethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	108		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	78		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	128		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	2100	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	2000	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	7400	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	5800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	10000	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	3700	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	1200	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	11000	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	1000	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	700	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	11000	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	560	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	2000	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	7000	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	14000	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	80		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	69		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	75		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	69		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	71		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 22, 2012

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201777, QC Sample No: BB87384 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860)													
ICP Metals - Soil													
Arsenic	BDL	2.90	2.79	NC	87.5	88.8	1.5	97.3	96.7	0.6	75 - 125	30	
Barium	BDL	20.6	18.9	8.60	91.5	92.6	1.2	97.7	96.3	1.4	75 - 125	30	
Cadmium	BDL	<0.42	<0.37	NC	88.3	88.2	0.1	97.0	96.5	0.5	75 - 125	30	
Chromium	BDL	17.9	19.5	8.60	92.6	94.0	1.5	99.0	97.5	1.5	75 - 125	30	
Lead	BDL	39.2	20.7	61.8	85.6	87.7	2.4	88.5	86.9	1.8	75 - 125	30	r
Selenium	BDL	<1.7	<1.5	NC	98.5	96.7	1.8	95.5	94.8	0.7	75 - 125	30	
Silver	BDL	<0.42	<0.37	NC	87.8	94.9	7.8	101	100	1.0	75 - 125	30	
QA/QC Batch 203126, QC Sample No: BB91408 (BB91853, BB91855, BB91856, BB91858)													
ICP Metals - TCLP Extraction													
Lead	BDL	3.96	4.52	13.2	94.3	96.2	2.0	101	103	2.0	75 - 125	20	
QA/QC Batch 201811, QC Sample No: BB91409 (BB91848, BB91849, BB91850)													
Mercury - Soil	BDL	0.83	0.39	72.1	111	108	2.7	NR	NR	NC	70 - 130	30	r
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201810, QC Sample No: BB91818 (BB91866)													
Mercury - Water	BDL	0.0004	0.0002	NC	93.9	89.8	4.5	90.9	86.1	5.4	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201816, QC Sample No: BB91848 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	<0.004	<0.004	NC	98.5	98.6	0.1	97.2	97.3	0.1	75 - 125	20	
Barium	BDL	0.185	0.186	0.50	101	102	1.0	102	101	1.0	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	99.9	101	1.1	98.8	99.3	0.5	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	96.6	97.3	0.7	95.6	95.9	0.3	75 - 125	20	
Lead	BDL	<0.010	<0.010	NC	97.3	95.9	1.4	95.3	96.8	1.6	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	105	105	0.0	103	103	0.0	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	98.4	98.5	0.1	97.5	98.1	0.6	75 - 125	20	
QA/QC Batch 201812, QC Sample No: BB91851 (BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)													
Mercury - Soil	BDL	0.19	0.13	NC	102	95.3	6.8	95.6	113	16.7	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 203131, QC Sample No: BB91863 (BB91862, BB91863)													
ICP Metals - TCLP Extraction													
Lead	BDL	0.53	0.50	5.80	97.4	96.2	1.2	100	99.1	0.9	75 - 125	20	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 201778, QC Sample No: BB91864 (BB91861, BB91862, BB91863, BB91864, BB91865)												
ICP Metals - Soil												
Arsenic	BDL	15.1	15.0	0.70	88.0	90.4	2.7	97.3	99.1	1.8	75 - 125	30
Barium	BDL	81.5	78.7	3.50	90.2	96.1	6.3	103	96.9	6.1	75 - 125	30
Cadmium	BDL	<0.43	<0.46	NC	87.0	94.7	8.5	95.6	97.5	2.0	75 - 125	30
Chromium	BDL	12.5	13.6	8.40	92.4	98.9	6.8	98.1	102	3.9	75 - 125	30
Lead	BDL	287	250	13.8	91.7	93.0	1.4	93.5	92.1	1.5	75 - 125	30
Selenium	BDL	<1.7	<1.9	NC	98.3	103	4.7	95.9	97.3	1.4	75 - 125	30
Silver	BDL	<0.43	<0.46	NC	93.0	93.6	0.6	99.4	102	2.6	75 - 125	30
QA/QC Batch 201783, QC Sample No: BB92040 (BB91866)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	0.005	NC	101	99.8	1.2	98.6			75 - 125	20
Barium	BDL	0.181	0.184	1.60	101	98.4	2.6	97.8			75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	101	98.3	2.7	97.2			75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	101	98.1	2.9	97.0			75 - 125	20
Lead	BDL	<0.002	<0.002	NC	98.4	97.3	1.1	95.3			75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	104	103	1.0	100			75 - 125	20
Silver	BDL	<0.002	<0.001	NC	98.4	96.2	2.3	95.2			75 - 125	20
Comment:												
MSD not reported.												
QA/QC Batch 201905, QC Sample No: BB92463 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)												
Mercury - Water	BDL	0.0006	0.0004	NC	101	97.8	3.2	79.0	76.4	3.3	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 201906, QC Sample No: BB92592 (BB91865)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	96.8	97.0	0.2	95.4	95.6	0.2	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 22, 2012

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201500, QC Sample No: BB90474 (BB91866)										
Polychlorinated Biphenyls - Ground Water										
PCB-1016	ND	99	98	1.0				40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	93	96	3.2				40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	
% DCBP (Surrogate Rec)	83	45	74	48.7				30 - 150	20	r
% TCMX (Surrogate Rec)	84	93	96	3.2				30 - 150	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

* The DCBP surrogate in the LCS sample was low. All other components were within control. No bias is suspected.

QA/QC Batch 201715, QC Sample No: BB90671 (BB91866)

Chlorinated Herbicides - Ground Water

2,4,5-T	ND	71	76	6.8				40 - 140	20	
2,4,5-TP (Silvex)	ND	72	76	5.4				40 - 140	20	
2,4-D	ND	82	85	3.6				40 - 140	20	
2,4-DB	ND	30	29	3.4				40 - 140	20	l
Dalapon	ND	55	58	5.3				40 - 140	20	
Dicamba	ND	75	78	3.9				40 - 140	20	
Dichloroprop	ND	83	74	11.5				40 - 140	20	
Dinoseb	ND	57	8.4	148.6				40 - 140	20	l,r
% DCAA (Surrogate Rec)	55	60	57	5.1				30 - 150	20	

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted.

QA/QC Batch 201687, QC Sample No: BB91005 (BB91866)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	83	79	4.9				30 - 130	20	
1,2,4-Trichlorobenzene	ND	69	72	4.3				30 - 130	20	
1,2-Dichlorobenzene	ND	64	71	10.4				30 - 130	20	
1,3-Dichlorobenzene	ND	62	67	7.8				30 - 130	20	
1,4-Dichlorobenzene	ND	66	69	4.4				30 - 130	20	
2,4,5-Trichlorophenol	ND	81	76	6.4				30 - 130	20	
2,4,6-Trichlorophenol	ND	86	82	4.8				30 - 130	20	
2,4-Dichlorophenol	ND	88	83	5.8				30 - 130	20	
2,4-Dimethylphenol	ND	51	45	12.5				30 - 130	20	
2,4-Dinitrophenol	ND	94	80	16.1				30 - 130	20	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	87	81	7.1				30 - 130	20	
2,6-Dinitrotoluene	ND	83	76	8.8				30 - 130	20	
2-Chloronaphthalene	ND	75	77	2.6				30 - 130	20	
2-Chlorophenol	ND	72	70	2.8				30 - 130	20	
2-Methylnaphthalene	ND	80	76	5.1				30 - 130	20	
2-Methylphenol (o-cresol)	ND	75	66	12.8				30 - 130	20	
2-Nitroaniline	ND	149	141	5.5				30 - 130	20	I
2-Nitrophenol	ND	80	74	7.8				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	79	69	13.5				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	>150	>150	NC				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	102	93	9.2				30 - 130	20	
4-Bromophenyl phenyl ether	ND	82	82	0.0				30 - 130	20	
4-Chloro-3-methylphenol	ND	88	80	9.5				30 - 130	20	
4-Chloroaniline	ND	>150	>150	NC				30 - 130	20	I
4-Chlorophenyl phenyl ether	ND	87	84	3.5				30 - 130	20	
4-Nitroaniline	ND	82	77	6.3				30 - 130	20	
4-Nitrophenol	ND	93	85	9.0				30 - 130	20	
Acenaphthene	ND	79	76	3.9				30 - 130	20	
Acenaphthylene	ND	76	73	4.0				30 - 130	20	
Acetophenone	ND	74	72	2.7				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	80	77	3.8				30 - 130	20	
Azobenzene	ND	77	73	5.3				30 - 130	20	
Benz(a)anthracene	ND	80	78	2.5				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	68	68	0.0				30 - 130	20	
Benzo(b)fluoranthene	ND	76	76	0.0				30 - 130	20	
Benzo(ghi)perylene	ND	76	79	3.9				30 - 130	20	
Benzo(k)fluoranthene	ND	67	67	0.0				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	69	66	4.4				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	77	77	0.0				30 - 130	20	
Bis(2-chloroethyl)ether	ND	64	65	1.6				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	63	64	1.6				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	68	67	1.5				30 - 130	20	
Carbazole	ND	90	108	18.2				30 - 130	20	
Chrysene	ND	71	75	5.5				30 - 130	20	
Dibenz(a,h)anthracene	ND	74	76	2.7				30 - 130	20	
Dibenzofuran	ND	82	77	6.3				30 - 130	20	
Diethyl phthalate	ND	86	83	3.6				30 - 130	20	
Dimethylphthalate	ND	86	82	4.8				30 - 130	20	
Di-n-butylphthalate	ND	78	80	2.5				30 - 130	20	
Di-n-octylphthalate	ND	80	85	6.1				30 - 130	20	
Fluoranthene	ND	81	81	0.0				30 - 130	20	
Fluorene	ND	86	80	7.2				30 - 130	20	
Hexachlorobenzene	ND	73	76	4.0				30 - 130	20	
Hexachlorobutadiene	ND	71	81	13.2				30 - 130	20	
Hexachlorocyclopentadiene	ND	75	71	5.5				30 - 130	20	
Hexachloroethane	ND	59	65	9.7				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	77	76	1.3				30 - 130	20	
Isophorone	ND	75	75	0.0				30 - 130	20	
Naphthalene	ND	73	76	4.0				30 - 130	20	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Nitrobenzene	ND	74	71	4.1				30 - 130	20	
N-Nitrosodimethylamine	ND	61	60	1.7				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	74	67	9.9				30 - 130	20	
N-Nitrosodiphenylamine	ND	106	104	1.9				30 - 130	20	
Pentachloronitrobenzene	ND	>150	>150	NC				30 - 130	20	l
Pentachlorophenol	ND	98	92	6.3				30 - 130	20	
Phenanthrene	ND	82	80	2.5				30 - 130	20	
Phenol	ND	77	69	11.0				30 - 130	20	
Pyrene	ND	82	84	2.4				30 - 130	20	
Pyridine	ND	53	35	40.9				30 - 130	20	r
% 2,4,6-Tribromophenol	108	74	74	0.0				15 - 130	20	
% 2-Fluorobiphenyl	78	70	71	1.4				30 - 130	20	
% 2-Fluorophenol	77	63	61	3.2				15 - 130	20	
% Nitrobenzene-d5	88	71	66	7.3				30 - 130	20	
% Phenol-d5	79	69	64	7.5				15 - 130	20	
% Terphenyl-d14	105	76	79	3.9				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201667, QC Sample No: BB91025 (BB91866)

Pesticides - Ground Water

4,4' -DDD	ND	101	118	15.5				40 - 140	20	
4,4' -DDE	ND	128	97	27.6				40 - 140	20	r
4,4' -DDT	ND	>130	104	NC				40 - 140	20	l
a-BHC	ND	103	100	3.0				40 - 140	20	
a-Chlordane	ND	116	91	24.2				40 - 140	20	r
Alachlor	ND	N/A	N/A	NC				40 - 140	20	
Aldrin	ND	98	93	5.2				40 - 140	20	
b-BHC	ND	92	97	5.3				40 - 140	20	
Chlordane	ND	N/A	N/A	NC				40 - 140	20	
d-BHC	ND	110	100	9.5				40 - 140	20	
Dieldrin	ND	119	102	15.4				40 - 140	20	
Endosulfan I	ND	123	84	37.7				40 - 140	20	r
Endosulfan II	ND	115	102	12.0				40 - 140	20	
Endosulfan sulfate	ND	125	106	16.5				40 - 140	20	
Endrin	ND	126	100	23.0				40 - 140	20	r
Endrin aldehyde	ND	>130	100	NC				40 - 140	20	l
Endrin ketone	ND	122	113	7.7				40 - 140	20	
g-BHC	ND	102	99	3.0				40 - 140	20	
g-Chlordane	ND	110	90	20.0				40 - 140	20	
Heptachlor	ND	103	99	4.0				40 - 140	20	
Heptachlor epoxide	ND	109	97	11.7				40 - 140	20	
Methoxychlor	ND	127	110	14.3				40 - 140	20	
Toxaphene	ND	N/A	N/A	NC				40 - 140	20	
% DCBP	128	128	123	4.0				30 - 150	20	
% TCMX	106	108	100	7.7				30 - 150	20	

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201692, QC Sample No: BB91160 (BB91866)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	86	105	19.9				50 - 150	20	
% n-Pentacosane	77	84	102	19.4				50 - 150	20	
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 201972, QC Sample No: BB91269 (BB91866, BB91867)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	90	95	5.4	94	94	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	97	104	7.0	105	101	3.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	122	118	3.3	120	115	4.3	70 - 130	30	
1,1,2-Trichloroethane	ND	105	105	0.0	104	100	3.9	70 - 130	30	
1,1-Dichloroethane	ND	102	109	6.6	110	105	4.7	70 - 130	30	
1,1-Dichloroethene	ND	88	94	6.6	101	96	5.1	70 - 130	30	
1,1-Dichloropropene	ND	109	116	6.2	116	109	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	114	112	1.8	102	101	1.0	70 - 130	30	
1,2,3-Trichloropropane	ND	106	106	0.0	107	107	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	111	111	0.0	105	102	2.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	108	111	2.7	109	103	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	110	108	1.8	102	98	4.0	70 - 130	30	
1,2-Dibromoethane	ND	105	104	1.0	106	101	4.8	70 - 130	30	
1,2-Dichlorobenzene	ND	93	93	0.0	93	90	3.3	70 - 130	30	
1,2-Dichloroethane	ND	121	123	1.6	128	121	5.6	70 - 130	30	
1,2-Dichloropropane	ND	108	113	4.5	113	107	5.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	108	105	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	103	100	3.0	70 - 130	30	
1,3-Dichloropropane	ND	125	121	3.3	120	118	1.7	70 - 130	30	
1,4-Dichlorobenzene	ND	77	83	7.5	85	83	2.4	70 - 130	30	
2,2-Dichloropropane	ND	65	68	4.5	54	51	5.7	70 - 130	30	l,m
2-Chlorotoluene	ND	111	111	0.0	111	106	4.6	70 - 130	30	
2-Hexanone	ND	133	127	4.6	124	122	1.6	70 - 130	30	l
2-Isopropyltoluene	ND	99	104	4.9	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	105	107	1.9	109	104	4.7	70 - 130	30	
4-Methyl-2-pentanone	ND	118	113	4.3	109	107	1.9	70 - 130	30	
Acetone	ND	125	111	11.9	124	122	1.6	70 - 130	30	
Acrylonitrile	ND	111	113	1.8	112	101	10.3	70 - 130	30	
Benzene	ND	106	112	5.5	112	105	6.5	70 - 130	30	
Bromobenzene	ND	115	117	1.7	114	108	5.4	70 - 130	30	
Bromochloromethane	ND	96	100	4.1	101	97	4.0	70 - 130	30	
Bromodichloromethane	ND	102	106	3.8	109	103	5.7	70 - 130	30	
Bromoform	ND	76	75	1.3	76	75	1.3	70 - 130	30	
Bromomethane	ND	41	62	40.8	84	87	3.5	70 - 130	30	l,r
Carbon Disulfide	ND	89	96	7.6	98	94	4.2	70 - 130	30	
Carbon tetrachloride	ND	102	107	4.8	113	107	5.5	70 - 130	30	
Chlorobenzene	ND	77	83	7.5	86	83	3.6	70 - 130	30	
Chloroethane	ND	90	101	11.5	115	103	11.0	70 - 130	30	
Chloroform	ND	101	104	2.9	108	103	4.7	70 - 130	30	
Chloromethane	ND	89	95	6.5	116	111	4.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	96	103	7.0	100	97	3.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Dibromochloromethane	ND	116	112	3.5	115	109	5.4	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromomethane	ND	101	108	6.7	112	107	4.6	70 - 130	30	
Dichlorodifluoromethane	ND	67	71	5.8	108	105	2.8	70 - 130	30	l
Ethylbenzene	ND	69	74	7.0	73	71	2.8	70 - 130	30	l
Hexachlorobutadiene	ND	99	104	4.9	91	93	2.2	70 - 130	30	
Isopropylbenzene	ND	105	109	3.7	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	77	81	5.1	81	79	2.5	70 - 130	30	
Methyl ethyl ketone	ND	96	101	5.1	123	124	0.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	110	106	3.7	70 - 130	30	
Methylene chloride	ND	79	83	4.9	85	82	3.6	70 - 130	30	
Naphthalene	ND	127	124	2.4	116	115	0.9	70 - 130	30	
n-Butylbenzene	ND	106	109	2.8	104	101	2.9	70 - 130	30	
n-Propylbenzene	ND	95	98	3.1	99	96	3.1	70 - 130	30	
o-Xylene	ND	78	80	2.5	80	77	3.8	70 - 130	30	
p-Isopropyltoluene	ND	110	115	4.4	106	104	1.9	70 - 130	30	
sec-Butylbenzene	ND	99	103	4.0	103	100	3.0	70 - 130	30	
Styrene	ND	69	71	2.9	68	67	1.5	70 - 130	30	l,m
tert-Butylbenzene	ND	106	109	2.8	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	106	111	4.6	110	106	3.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	117	123	5.0	117	118	0.9	70 - 130	30	
Toluene	ND	97	102	5.0	100	94	6.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	92	99	7.3	102	97	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	95	1.0	94	88	6.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	90	13.5	90	98	8.5	70 - 130	30	
Trichloroethene	ND	96	102	6.1	100	94	6.2	70 - 130	30	
Trichlorofluoromethane	ND	97	107	9.8	111	105	5.6	70 - 130	30	
Trichlorotrifluoroethane	ND	80	89	10.7	86	84	2.4	70 - 130	30	
Vinyl chloride	ND	86	94	8.9	110	105	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	104	101	2.9	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	103	118	117	0.9	117	118	0.9	70 - 130	30	
% Dibromofluoromethane	88	88	89	1.1	88	89	1.1	70 - 130	30	
% Toluene-d8	102	102	103	1.0	102	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201689, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862)

Chlorinated Herbicides - Soil

2,4,5-T	ND	43			39	38	2.6	40 - 140	30	
2,4,5-TP (Silvex)	ND	41			40	40	0.0	40 - 140	30	
2,4-D	ND	49			46	46	0.0	40 - 140	30	
2,4-DB	ND	36			34	34	0.0	40 - 140	30	l
Dalapon	ND	43			45	45	0.0	40 - 140	30	
Dicamba	ND	46			47	46	2.2	40 - 140	30	
Dichloroprop	ND	43			39	41	5.0	40 - 140	30	
Dinoseb	ND	42			43	45	4.5	40 - 140	30	
% DCAA (Surrogate Rec)	70	41			40	41	2.5	30 - 150	30	

QA/QC Batch 201677, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855)

Pesticides - Soil

4,4' -DDD	ND	88	86	2.3	89	79	11.9	40 - 140	30	
4,4' -DDE	ND	74	79	6.5	83	71	15.6	40 - 140	30	
4,4' -DDT	ND	76	77	1.3	79	75	5.2	40 - 140	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
a-BHC	ND	85	85	0.0	90	88	2.2	40 - 140	30	
a-Chlordane	ND	86	85	1.2	89	84	5.8	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	86	85	1.2	91	88	3.4	40 - 140	30	
b-BHC	ND	83	83	0.0	83	81	2.4	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	85	84	1.2	83	82	1.2	40 - 140	30	
Dieldrin	ND	88	88	0.0	93	87	6.7	40 - 140	30	
Endosulfan I	ND	90	93	3.3	102	92	10.3	40 - 140	30	
Endosulfan II	ND	66	66	0.0	88	82	7.1	40 - 140	30	
Endosulfan sulfate	ND	81	73	10.4	91	88	3.4	40 - 140	30	
Endrin	ND	94	93	1.1	96	92	4.3	40 - 140	30	
Endrin aldehyde	ND	63	65	3.1	90	86	4.5	40 - 140	30	
Endrin ketone	ND	89	89	0.0	95	90	5.4	40 - 140	30	
g-BHC	ND	85	84	1.2	89	86	3.4	40 - 140	30	
g-Chlordane	ND	83	81	2.4	84	80	4.9	40 - 140	30	
Heptachlor	ND	87	87	0.0	90	89	1.1	40 - 140	30	
Heptachlor epoxide	ND	85	84	1.2	90	83	8.1	40 - 140	30	
Methoxychlor	ND	80	78	2.5	81	75	7.7	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	91	96	77	22.0	95	70	30.3	30 - 150	30	
% TCMX	86	92	92	0.0	94	91	3.2	30 - 150	30	

QA/QC Batch 201675, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	88			70	87	21.7	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	89			74	94	23.8	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	63	77			61	79	25.7	30 - 150	30	
% TCMX (Surrogate Rec)	49	72			63	79	22.5	30 - 150	30	

QA/QC Batch 201690, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	72	75	4.1	77	78	1.3	30 - 130	30	
1,2,4-Trichlorobenzene	ND	68	70	2.9	73	73	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	70	69	1.4	73	73	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	67	68	1.5	71	71	0.0	30 - 130	30	
1,4-Dichlorobenzene	ND	68	68	0.0	71	71	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	78	79	1.3	83	83	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	74	73	1.4	77	78	1.3	30 - 130	30	
2,4-Dichlorophenol	ND	78	77	1.3	81	80	1.2	30 - 130	30	
2,4-Dimethylphenol	ND	53	53	0.0	61	60	1.7	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	7.4	5.8	24.2	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	78	77	1.3	80	78	2.5	30 - 130	30	
2,6-Dinitrotoluene	ND	78	78	0.0	82	81	1.2	30 - 130	30	
2-Chloronaphthalene	ND	74	73	1.4	76	76	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Chlorophenol	ND	70	71	1.4	75	74	1.3	30 - 130	30	
2-Methylnaphthalene	ND	71	72	1.4	75	75	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	73	71	2.8	76	76	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	142	NC	30 - 130	30	l,m
2-Nitrophenol	ND	71	70	1.4	77	75	2.6	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	74	73	1.4	78	75	3.9	30 - 130	30	
3,3'-Dichlorobenzidine	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	81	80	1.2	84	80	4.9	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	34	33	3.0	67	56	17.9	30 - 130	30	
4-Bromophenyl phenyl ether	ND	77	79	2.6	81	85	4.8	30 - 130	30	
4-Chloro-3-methylphenol	ND	79	79	0.0	83	83	0.0	30 - 130	30	
4-Chloroaniline	ND	88	94	6.6	92	91	1.1	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	77	78	1.3	80	80	0.0	30 - 130	30	
4-Nitroaniline	ND	81	80	1.2	84	80	4.9	30 - 130	30	
4-Nitrophenol	ND	75	72	4.1	76	63	18.7	30 - 130	30	
Acenaphthene	ND	73	73	0.0	77	76	1.3	30 - 130	30	
Acenaphthylene	ND	75	74	1.3	78	77	1.3	30 - 130	30	
Acetophenone	ND	71	69	2.9	73	68	7.1	30 - 130	30	
Aniline	ND	104	105	1.0	110	104	5.6	30 - 130	30	
Anthracene	ND	76	76	0.0	79	79	0.0	30 - 130	30	
Azobenzene	ND	71	71	0.0	73	72	1.4	30 - 130	30	
Benz(a)anthracene	ND	81	82	1.2	84	85	1.2	30 - 130	30	
Benzidine	ND	58	55	5.3	56	35	46.2	30 - 130	30	r
Benzo(a)pyrene	ND	73	73	0.0	76	75	1.3	30 - 130	30	
Benzo(b)fluoranthene	ND	79	80	1.3	83	86	3.6	30 - 130	30	
Benzo(ghi)perylene	ND	82	83	1.2	82	72	13.0	30 - 130	30	
Benzo(k)fluoranthene	ND	74	76	2.7	80	86	7.2	30 - 130	30	
Benzyl butyl phthalate	ND	81	83	2.4	83	106	24.3	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	72	72	0.0	76	76	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	68	67	1.5	70	70	0.0	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	70	65	7.4	70	69	1.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	75	79	5.2	79	102	25.4	30 - 130	30	
Carbazole	ND	110	109	0.9	114	104	9.2	30 - 130	30	
Chrysene	ND	76	75	1.3	78	79	1.3	30 - 130	30	
Dibenz(a,h)anthracene	ND	83	84	1.2	84	75	11.3	30 - 130	30	
Dibenzofuran	ND	74	74	0.0	77	76	1.3	30 - 130	30	
Diethyl phthalate	ND	77	79	2.6	80	81	1.2	30 - 130	30	
Dimethylphthalate	ND	77	78	1.3	80	80	0.0	30 - 130	30	
Di-n-butylphthalate	ND	73	75	2.7	77	82	6.3	30 - 130	30	
Di-n-octylphthalate	ND	80	83	3.7	84	99	16.4	30 - 130	30	
Fluoranthene	ND	75	75	0.0	79	76	3.9	30 - 130	30	
Fluorene	ND	76	75	1.3	78	77	1.3	30 - 130	30	
Hexachlorobenzene	ND	74	76	2.7	77	82	6.3	30 - 130	30	
Hexachlorobutadiene	ND	72	74	2.7	76	78	2.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	73	70	4.2	73	70	4.2	30 - 130	30	
Hexachloroethane	ND	68	68	0.0	71	71	0.0	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	83	84	1.2	84	74	12.7	30 - 130	30	
Isophorone	ND	73	73	0.0	76	73	4.0	30 - 130	30	
Naphthalene	ND	69	68	1.5	73	70	4.2	30 - 130	30	
Nitrobenzene	ND	72	71	1.4	74	73	1.4	30 - 130	30	
N-Nitrosodimethylamine	ND	60	49	20.2	62	56	10.2	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	72	66	8.7	72	68	5.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	94	94	0.0	97	95	2.1	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	37	36	2.7	67	66	1.5	30 - 130	30	
Phenanthrene	ND	76	76	0.0	80	79	1.3	30 - 130	30	
Phenol	ND	72	64	11.8	71	56	23.6	30 - 130	30	
Pyrene	ND	77	77	0.0	80	76	5.1	30 - 130	30	
Pyridine	ND	62	44	34.0	63	65	3.1	30 - 130	30	r
% 2,4,6-Tribromophenol	74	73	72	1.4	73	76	4.0	15 - 130	30	
% 2-Fluorobiphenyl	66	72	72	0.0	72	74	2.7	30 - 130	30	
% 2-Fluorophenol	68	68	68	0.0	73	71	2.8	15 - 130	30	
% Nitrobenzene-d5	70	72	71	1.4	74	73	1.4	30 - 130	30	
% Phenol-d5	68	71	69	2.9	73	50	37.4	15 - 130	30	r
% Terphenyl-d14	77	79	80	1.3	81	77	5.1	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201767, QC Sample No: BB91843 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	70			96	68	34.1	50 - 150	30	r
% n-Pentacosane	64	83			102	82	21.7	50 - 150	30	

QA/QC Batch 202022, QC Sample No: BB91855 (BB91855, BB91856, BB91857, BB91858, BB91859)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	102	106	3.8	52	54	3.8	70 - 130	30	m
1,1,1-Trichloroethane	ND	95	112	16.4	69	97	33.7	70 - 130	30	m,r
1,1,2,2-Tetrachloroethane	ND	104	109	4.7	96	98	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	102	103	1.0	88	90	2.2	70 - 130	30	
1,1-Dichloroethane	ND	95	122	24.9	84	111	27.7	70 - 130	30	
1,1-Dichloroethene	ND	112	110	1.8	117	110	6.2	70 - 130	30	
1,1-Dichloropropene	ND	91	89	2.2	86	127	38.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	107	116	8.1	97	101	4.0	70 - 130	30	
1,2,3-Trichloropropane	ND	119	127	6.5	105	110	4.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	110	113	2.7	98	100	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	117	119	1.7	110	112	1.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	106	113	6.4	57	63	10.0	70 - 130	30	m
1,2-Dibromoethane	ND	98	100	2.0	85	85	0.0	70 - 130	30	
1,2-Dichlorobenzene	ND	105	104	1.0	100	100	0.0	70 - 130	30	
1,2-Dichloroethane	ND	96	97	1.0	87	88	1.1	70 - 130	30	
1,2-Dichloropropane	ND	101	103	2.0	94	93	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	115	117	1.7	111	111	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	111	110	0.9	102	100	2.0	70 - 130	30	
1,3-Dichloropropane	ND	103	106	2.9	94	98	4.2	70 - 130	30	
1,4-Dichlorobenzene	ND	113	111	1.8	105	103	1.9	70 - 130	30	
2,2-Dichloropropane	ND	100	121	19.0	60	90	40.0	70 - 130	30	m,r
2-Chlorotoluene	ND	103	102	1.0	104	99	4.9	70 - 130	30	
2-Hexanone	ND	75	82	8.9	47	48	2.1	70 - 130	30	m
2-Isopropyltoluene	ND	121	118	2.5	122	121	0.8	70 - 130	30	
4-Chlorotoluene	ND	117	113	3.5	111	109	1.8	70 - 130	30	
4-Methyl-2-pentanone	ND	88	92	4.4	83	84	1.2	70 - 130	30	
Acetone	ND	93	100	7.3	<40	41	NC	70 - 130	30	m
Acrylonitrile	ND	89	121	30.5	85	119	33.3	70 - 130	30	r
Benzene	ND	103	104	1.0	97	99	2.0	70 - 130	30	
Bromobenzene	ND	103	104	1.0	102	97	5.0	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromochloromethane	ND	85	120	34.1	78	113	36.6	70 - 130	30	r
Bromodichloromethane	ND	103	102	1.0	69	68	1.5	70 - 130	30	m
Bromoform	ND	>150	>150	NC	69	73	5.6	70 - 130	30	l,m
Bromomethane	ND	133	120	10.3	98	80	20.2	70 - 130	30	l
Carbon Disulfide	ND	113	110	2.7	124	116	6.7	70 - 130	30	
Carbon tetrachloride	ND	99	117	16.7	43	70	47.8	70 - 130	30	m,r
Chlorobenzene	ND	106	106	0.0	103	103	0.0	70 - 130	30	
Chloroethane	ND	122	116	5.0	<40	<40	NC	70 - 130	30	m
Chloroform	ND	92	118	24.8	82	108	27.4	70 - 130	30	
Chloromethane	ND	102	105	2.9	94	105	11.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	125	32.6	81	116	35.5	70 - 130	30	r
cis-1,3-Dichloropropene	ND	100	101	1.0	70	71	1.4	70 - 130	30	
Dibromochloromethane	ND	109	113	3.6	52	52	0.0	70 - 130	30	m
Dibromomethane	ND	99	101	2.0	90	91	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	116	98	16.8	127	114	10.8	70 - 130	30	
Ethylbenzene	ND	110	108	1.8	105	102	2.9	70 - 130	30	
Hexachlorobutadiene	ND	108	106	1.9	105	104	1.0	70 - 130	30	
Isopropylbenzene	ND	123	119	3.3	120	117	2.5	70 - 130	30	
m&p-Xylene	ND	122	118	3.3	111	109	1.8	70 - 130	30	
Methyl ethyl ketone	ND	71	76	6.8	40	54	29.8	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	110	111	0.9	110	115	4.4	70 - 130	30	
Methylene chloride	ND	101	100	1.0	98	97	1.0	70 - 130	30	
Naphthalene	ND	105	122	15.0	98	109	10.6	70 - 130	30	
n-Butylbenzene	ND	123	118	4.1	111	108	2.7	70 - 130	30	
n-Propylbenzene	ND	107	104	2.8	113	107	5.5	70 - 130	30	
o-Xylene	ND	111	110	0.9	106	108	1.9	70 - 130	30	
p-Isopropyltoluene	ND	119	118	0.8	109	106	2.8	70 - 130	30	
sec-Butylbenzene	ND	118	114	3.4	115	111	3.5	70 - 130	30	
Styrene	ND	147	145	1.4	143	144	0.7	70 - 130	30	l,m
tert-Butylbenzene	ND	107	105	1.9	102	102	0.0	70 - 130	30	
Tetrachloroethene	ND	106	106	0.0	99	103	4.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	89	113	23.8	85	110	25.6	70 - 130	30	
Toluene	ND	104	103	1.0	99	96	3.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	113	112	0.9	109	107	1.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	101	103	2.0	61	63	3.2	70 - 130	30	m
trans-1,4-dichloro-2-butene	ND	118	122	3.3	<40	43	NC	70 - 130	30	m
Trichloroethene	ND	101	99	2.0	94	93	1.1	70 - 130	30	
Trichlorofluoromethane	ND	126	121	4.0	97	82	16.8	70 - 130	30	
Trichlorotrifluoroethane	ND	119	114	4.3	128	120	6.5	70 - 130	30	
Vinyl chloride	ND	119	111	7.0	105	98	6.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	95	97	2.1	96	100	4.1	70 - 130	30	
% Bromofluorobenzene	88	94	90	4.3	90	88	2.2	70 - 130	30	
% Dibromofluoromethane	122	81	125	42.7	80	123	42.4	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	100	99	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 202097, QC Sample No: BB91862 (BB91860, BB91862)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	99	105	5.9	86	91	5.6	70 - 130	30	
1,1,1-Trichloroethane	ND	115	86	28.9	107	83	25.3	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	103	97	6.0	96	94	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	108	110	1.8	104	107	2.8	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethane	ND	113	85	28.3	110	82	29.2	70 - 130	30	
1,1-Dichloroethene	ND	98	103	5.0	95	94	1.1	70 - 130	30	
1,1-Dichloropropene	ND	128	91	33.8	87	86	1.2	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	112	104	7.4	104	100	3.9	70 - 130	30	
1,2,3-Trichloropropane	ND	124	118	5.0	121	116	4.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	103	101	2.0	95	91	4.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	121	121	0.0	117	113	3.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	135	127	6.1	112	121	7.7	70 - 130	30	l
1,2-Dibromoethane	ND	110	113	2.7	103	103	0.0	70 - 130	30	
1,2-Dichlorobenzene	ND	95	94	1.1	91	91	0.0	70 - 130	30	
1,2-Dichloroethane	ND	104	105	1.0	101	100	1.0	70 - 130	30	
1,2-Dichloropropane	ND	105	112	6.5	104	105	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	115	113	1.8	113	107	5.5	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	96	95	1.0	70 - 130	30	
1,3-Dichloropropane	ND	104	107	2.8	105	103	1.9	70 - 130	30	
1,4-Dichlorobenzene	ND	100	102	2.0	94	93	1.1	70 - 130	30	
2,2-Dichloropropane	ND	118	87	30.2	108	81	28.6	70 - 130	30	
2-Chlorotoluene	ND	97	100	3.0	97	97	0.0	70 - 130	30	
2-Hexanone	ND	91	92	1.1	71	64	10.4	70 - 130	30	m
2-Isopropyltoluene	ND	112	116	3.5	111	108	2.7	70 - 130	30	
4-Chlorotoluene	ND	112	113	0.9	104	105	1.0	70 - 130	30	
4-Methyl-2-pentanone	ND	100	96	4.1	87	85	2.3	70 - 130	30	
Acetone	ND	92	85	7.9	78	65	18.2	70 - 130	30	m
Acrylonitrile	ND	110	70	44.4	99	67	38.6	70 - 130	30	m,r
Benzene	ND	103	107	3.8	101	102	1.0	70 - 130	30	
Bromobenzene	ND	99	102	3.0	99	104	4.9	70 - 130	30	
Bromochloromethane	ND	117	75	43.8	111	77	36.2	70 - 130	30	r
Bromodichloromethane	ND	108	115	6.3	97	106	8.9	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	96	103	7.0	87	93	6.7	70 - 130	30	
Carbon Disulfide	ND	89	92	3.3	84	83	1.2	70 - 130	30	
Carbon tetrachloride	ND	115	87	27.7	96	76	23.3	70 - 130	30	
Chlorobenzene	ND	97	101	4.0	95	95	0.0	70 - 130	30	
Chloroethane	ND	98	104	5.9	91	96	5.3	70 - 130	30	
Chloroform	ND	106	78	30.4	101	77	27.0	70 - 130	30	
Chloromethane	ND	96	91	5.3	97	87	10.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	117	79	38.8	114	78	37.5	70 - 130	30	r
cis-1,3-Dichloropropene	ND	107	113	5.5	99	103	4.0	70 - 130	30	
Dibromochloromethane	ND	114	120	5.1	94	107	12.9	70 - 130	30	
Dibromomethane	ND	104	108	3.8	102	104	1.9	70 - 130	30	
Dichlorodifluoromethane	ND	83	90	8.1	84	89	5.8	70 - 130	30	
Ethylbenzene	ND	96	103	7.0	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	103	104	1.0	105	98	6.9	70 - 130	30	
Isopropylbenzene	ND	115	121	5.1	115	116	0.9	70 - 130	30	
m&p-Xylene	ND	113	119	5.2	108	108	0.0	70 - 130	30	
Methyl ethyl ketone	ND	103	69	39.5	73	56	26.4	70 - 130	30	l,m,r
Methyl t-butyl ether (MTBE)	ND	95	94	1.1	93	91	2.2	70 - 130	30	
Methylene chloride	ND	93	97	4.2	91	89	2.2	70 - 130	30	
Naphthalene	ND	124	113	9.3	124	118	5.0	70 - 130	30	
n-Butylbenzene	ND	115	118	2.6	110	104	5.6	70 - 130	30	
n-Propylbenzene	ND	101	107	5.8	102	101	1.0	70 - 130	30	
o-Xylene	ND	100	102	2.0	96	99	3.1	70 - 130	30	
p-Isopropyltoluene	ND	118	120	1.7	115	112	2.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
sec-Butylbenzene	ND	117	122	4.2	115	114	0.9	70 - 130	30	
Styrene	ND	148	>150	NC	134	138	2.9	70 - 130	30	l,m
tert-Butylbenzene	ND	109	114	4.5	110	110	0.0	70 - 130	30	
Tetrachloroethene	ND	101	102	1.0	102	97	5.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	104	72	36.4	95	73	26.2	70 - 130	30	r
Toluene	ND	100	107	6.8	99	99	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	100	104	3.9	96	94	2.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	112	116	3.5	96	102	6.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	123	117	5.0	91	104	13.3	70 - 130	30	
Trichloroethene	ND	104	112	7.4	108	106	1.9	70 - 130	30	
Trichlorofluoromethane	ND	104	106	1.9	97	96	1.0	70 - 130	30	
Trichlorotrifluoroethane	ND	89	91	2.2	86	82	4.8	70 - 130	30	
Vinyl chloride	ND	95	100	5.1	92	93	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	95	92	90	2.2	92	92	0.0	70 - 130	30	
% Bromofluorobenzene	95	92	94	2.2	91	94	3.2	70 - 130	30	
% Dibromofluoromethane	113	114	71	46.5	111	71	44.0	70 - 130	30	r
% Toluene-d8	98	98	102	4.0	98	100	2.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201770, QC Sample No: BB92069 (BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

Pesticides - Soil

4,4' -DDD	ND	63	100	45.4	126	127	0.8	40 - 140	30	r
4,4' -DDE	ND	88	75	16.0	>130	>130	NC	40 - 140	30	m
4,4' -DDT	ND	75	96	24.6	>130	>130	NC	40 - 140	30	m
a-BHC	ND	98	117	17.7	113	118	4.3	40 - 140	30	
a-Chlordane	ND	91	103	12.4	102	104	1.9	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	100	119	17.4	112	111	0.9	40 - 140	30	
b-BHC	ND	91	111	19.8	105	116	10.0	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	88	107	19.5	108	117	8.0	40 - 140	30	
Dieldrin	ND	99	109	9.6	>130	>130	NC	40 - 140	30	m
Endosulfan I	ND	112	111	0.9	112	117	4.4	40 - 140	30	
Endosulfan II	ND	62	79	24.1	94	106	12.0	40 - 140	30	
Endosulfan sulfate	ND	74	83	11.5	102	123	18.7	40 - 140	30	
Endrin	ND	96	113	16.3	>130	>130	NC	40 - 140	30	m
Endrin aldehyde	ND	66	66	0.0	>130	>130	NC	40 - 140	30	m
Endrin ketone	ND	87	101	14.9	110	120	8.7	40 - 140	30	
g-BHC	ND	96	115	18.0	109	117	7.1	40 - 140	30	
g-Chlordane	ND	85	98	14.2	99	99	0.0	40 - 140	30	
Heptachlor	ND	100	119	17.4	112	113	0.9	40 - 140	30	
Heptachlor epoxide	ND	92	110	17.8	106	109	2.8	40 - 140	30	
Methoxychlor	ND	82	92	11.5	112	123	9.4	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	89	83	92	10.3	77	85	9.9	30 - 150	30	
% TCMX	130	112	130	14.9	116	122	5.0	30 - 150	30	

QA/QC Batch 201772, QC Sample No: BB92175 (BB91865)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	74	96	25.9	98			50 - 150	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% n-Pentacosane	52	85	109	24.7	108			50 - 150	30	
QA/QC Batch 201769, QC Sample No: BB92183 (BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	63	62	1.6	71	65	8.8	30 - 130	30	
1,2,4-Trichlorobenzene	ND	65	61	6.3	69	66	4.4	30 - 130	30	
1,2-Dichlorobenzene	ND	74	71	4.1	81	74	9.0	30 - 130	30	
1,3-Dichlorobenzene	ND	74	68	8.5	80	71	11.9	30 - 130	30	
1,4-Dichlorobenzene	ND	73	70	4.2	80	72	10.5	30 - 130	30	
2,4,5-Trichlorophenol	ND	76	80	5.1	85	75	12.5	30 - 130	30	
2,4,6-Trichlorophenol	ND	74	79	6.5	82	73	11.6	30 - 130	30	
2,4-Dichlorophenol	ND	73	73	0.0	82	77	6.3	30 - 130	30	
2,4-Dimethylphenol	ND	51	51	0.0	58	53	9.0	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	73	73	0.0	83	77	7.5	30 - 130	30	
2,6-Dinitrotoluene	ND	77	79	2.6	83	81	2.4	30 - 130	30	
2-Chloronaphthalene	ND	80	80	0.0	91	84	8.0	30 - 130	30	
2-Chlorophenol	ND	83	81	2.4	95	86	9.9	30 - 130	30	
2-Methylnaphthalene	ND	73	74	1.4	80	78	2.5	30 - 130	30	
2-Methylphenol (o-cresol)	ND	81	79	2.5	90	85	5.7	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	53	59	10.7	67	62	7.8	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	88	86	2.3	98	90	8.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	117	111	5.3	118	108	8.8	30 - 130	30	
3-Nitroaniline	ND	128	130	1.6	>150	139	NC	30 - 130	30	m
4,6-Dinitro-2-methylphenol	ND	18	50	94.1	24	21	13.3	30 - 130	30	l,m,r
4-Bromophenyl phenyl ether	ND	74	76	2.7	80	78	2.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	82	78	5.0	89	85	4.6	30 - 130	30	
4-Chloroaniline	ND	91	85	6.8	97	92	5.3	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	70	71	1.4	83	75	10.1	30 - 130	30	
4-Nitroaniline	ND	85	88	3.5	98	89	9.6	30 - 130	30	
4-Nitrophenol	ND	64	69	7.5	60	50	18.2	30 - 130	30	
Acenaphthene	ND	83	83	0.0	96	85	12.2	30 - 130	30	
Acenaphthylene	ND	82	83	1.2	92	85	7.9	30 - 130	30	
Acetophenone	ND	77	74	4.0	88	78	12.0	30 - 130	30	
Aniline	ND	116	109	6.2	118	106	10.7	30 - 130	30	
Anthracene	ND	80	82	2.5	93	87	6.7	30 - 130	30	
Azobenzene	ND	98	97	1.0	111	102	8.5	30 - 130	30	
Benz(a)anthracene	ND	78	78	0.0	86	84	2.4	30 - 130	30	
Benzidine	ND	66	67	1.5	38	42	10.0	30 - 130	30	
Benzo(a)pyrene	ND	78	74	5.3	87	82	5.9	30 - 130	30	
Benzo(b)fluoranthene	ND	88	85	3.5	92	97	5.3	30 - 130	30	
Benzo(ghi)perylene	ND	75	74	1.3	87	79	9.6	30 - 130	30	
Benzo(k)fluoranthene	ND	80	79	1.3	95	81	15.9	30 - 130	30	
Benzyl butyl phthalate	ND	87	87	0.0	99	98	1.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	90	87	3.4	99	93	6.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	91	87	4.5	104	90	14.4	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	99	93	6.3	111	99	11.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	91	92	1.1	107	101	5.8	30 - 130	30	
Carbazole	ND	106	111	4.6	120	116	3.4	30 - 130	30	
Chrysene	ND	76	75	1.3	88	80	9.5	30 - 130	30	
Dibenz(a,h)anthracene	ND	74	74	0.0	87	81	7.1	30 - 130	30	
Dibenzofuran	ND	77	79	2.6	89	82	8.2	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Diethyl phthalate	ND	81	80	1.2	91	83	9.2	30 - 130	30	
Dimethylphthalate	ND	78	79	1.3	89	83	7.0	30 - 130	30	
Di-n-butylphthalate	ND	86	89	3.4	98	92	6.3	30 - 130	30	
Di-n-octylphthalate	ND	87	87	0.0	100	93	7.3	30 - 130	30	
Fluoranthene	ND	78	81	3.8	89	89	0.0	30 - 130	30	
Fluorene	ND	80	80	0.0	91	82	10.4	30 - 130	30	
Hexachlorobenzene	ND	96	98	2.1	108	104	3.8	30 - 130	30	
Hexachlorobutadiene	ND	60	58	3.4	64	61	4.8	30 - 130	30	
Hexachlorocyclopentadiene	ND	69	73	5.6	84	77	8.7	30 - 130	30	
Hexachloroethane	ND	77	73	5.3	85	77	9.9	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	74	74	0.0	87	82	5.9	30 - 130	30	
Isophorone	ND	84	81	3.6	90	86	4.5	30 - 130	30	
Naphthalene	ND	81	79	2.5	88	80	9.5	30 - 130	30	
Nitrobenzene	ND	79	76	3.9	88	81	8.3	30 - 130	30	
N-Nitrosodimethylamine	ND	90	80	11.8	99	88	11.8	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	82	79	3.7	90	85	5.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	88	85	3.5	93	88	5.5	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	42	51	19.4	67	41	48.1	30 - 130	30	r
Phenanthrene	ND	82	83	1.2	91	90	1.1	30 - 130	30	
Phenol	ND	88	85	3.5	99	91	8.4	30 - 130	30	
Pyrene	ND	83	87	4.7	93	94	1.1	30 - 130	30	
Pyridine	ND	80	74	7.8	88	76	14.6	30 - 130	30	
% 2,4,6-Tribromophenol	75	83	88	5.8	90	85	5.7	15 - 130	30	
% 2-Fluorobiphenyl	67	72	71	1.4	81	76	6.4	30 - 130	30	
% 2-Fluorophenol	87	83	82	1.2	94	85	10.1	15 - 130	30	
% Nitrobenzene-d5	80	78	75	3.9	89	81	9.4	30 - 130	30	
% Phenol-d5	89	88	84	4.7	98	90	8.5	15 - 130	30	
% Terphenyl-d14	71	79	82	3.7	90	92	2.2	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201951, QC Sample No: BB92297 (BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	95	98	3.1	91	81	11.6	70 - 130	30	
1,1,1-Trichloroethane	ND	119	114	4.3	120	89	29.7	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	102	100	2.0	104	94	10.1	70 - 130	30	
1,1,2-Trichloroethane	ND	103	102	1.0	91	85	6.8	70 - 130	30	
1,1-Dichloroethane	ND	127	120	5.7	125	88	34.7	70 - 130	30	r
1,1-Dichloroethene	ND	114	108	5.4	118	114	3.4	70 - 130	30	
1,1-Dichloropropene	ND	85	85	0.0	82	81	1.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	89	100	11.6	57	41	32.7	70 - 130	30	m,r
1,2,3-Trichloropropane	ND	127	126	0.8	110	115	4.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	79	86	8.5	54	42	25.0	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	107	106	0.9	78	64	19.7	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	93	105	12.1	95	82	14.7	70 - 130	30	
1,2-Dibromoethane	ND	95	98	3.1	81	76	6.4	70 - 130	30	
1,2-Dichlorobenzene	ND	95	95	0.0	79	67	16.4	70 - 130	30	m
1,2-Dichloroethane	ND	94	94	0.0	88	84	4.7	70 - 130	30	
1,2-Dichloropropane	ND	101	100	1.0	94	92	2.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	99	81	20.0	70 - 130	30	
1,3-Dichlorobenzene	ND	91	92	1.1	80	67	17.7	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3-Dichloropropane	ND	104	105	1.0	98	90	8.5	70 - 130	30	
1,4-Dichlorobenzene	ND	92	92	0.0	80	62	25.4	70 - 130	30	m
2,2-Dichloropropane	ND	111	108	2.7	111	83	28.9	70 - 130	30	
2-Chlorotoluene	ND	97	99	2.0	97	84	14.4	70 - 130	30	
2-Hexanone	ND	45	60	28.6	<40	49	NC	70 - 130	30	l,m
2-Isopropyltoluene	ND	109	108	0.9	98	80	20.2	70 - 130	30	
4-Chlorotoluene	ND	97	98	1.0	91	78	15.4	70 - 130	30	
4-Methyl-2-pentanone	ND	78	85	8.6	63	60	4.9	70 - 130	30	m
Acetone	ND	73	84	14.0	88	78	12.0	70 - 130	30	
Acrylonitrile	ND	133	120	10.3	116	76	41.7	70 - 130	30	l,r
Benzene	ND	102	102	0.0	91	86	5.6	70 - 130	30	
Bromobenzene	ND	102	103	1.0	96	82	15.7	70 - 130	30	
Bromochloromethane	ND	127	119	6.5	115	74	43.4	70 - 130	30	r
Bromodichloromethane	ND	91	92	1.1	88	87	1.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	96	84	13.3	70 - 130	30	l
Bromomethane	ND	132	119	10.4	131	139	5.9	70 - 130	30	l,m
Carbon Disulfide	ND	109	102	6.6	104	99	4.9	70 - 130	30	
Carbon tetrachloride	ND	110	107	2.8	114	89	24.6	70 - 130	30	
Chlorobenzene	ND	100	100	0.0	90	80	11.8	70 - 130	30	
Chloroethane	ND	124	115	7.5	127	130	2.3	70 - 130	30	
Chloroform	ND	123	115	6.7	119	83	35.6	70 - 130	30	r
Chloromethane	ND	107	101	5.8	112	99	12.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	130	125	3.9	118	76	43.3	70 - 130	30	r
cis-1,3-Dichloropropene	ND	89	90	1.1	78	75	3.9	70 - 130	30	
Dibromochloromethane	ND	93	94	1.1	86	83	3.6	70 - 130	30	
Dibromomethane	ND	98	99	1.0	86	82	4.8	70 - 130	30	
Dichlorodifluoromethane	ND	99	85	15.2	103	118	13.6	70 - 130	30	
Ethylbenzene	ND	101	101	0.0	94	86	8.9	70 - 130	30	
Hexachlorobutadiene	ND	91	92	1.1	63	48	27.0	70 - 130	30	m
Isopropylbenzene	ND	115	114	0.9	123	105	15.8	70 - 130	30	
m&p-Xylene	ND	105	105	0.0	88	78	12.0	70 - 130	30	
Methyl ethyl ketone	ND	58	74	24.2	73	56	26.4	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	114	112	1.8	107	101	5.8	70 - 130	30	
Methylene chloride	ND	110	104	5.6	106	101	4.8	70 - 130	30	
Naphthalene	ND	102	116	12.8	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	98	98	0.0	85	64	28.2	70 - 130	30	m
n-Propylbenzene	ND	99	97	2.0	108	90	18.2	70 - 130	30	
o-Xylene	ND	102	103	1.0	88	80	9.5	70 - 130	30	
p-Isopropyltoluene	ND	103	102	1.0	94	75	22.5	70 - 130	30	
sec-Butylbenzene	ND	105	105	0.0	106	87	19.7	70 - 130	30	
Styrene	ND	135	134	0.7	81	70	14.6	70 - 130	30	l
tert-Butylbenzene	ND	104	103	1.0	108	92	16.0	70 - 130	30	
Tetrachloroethene	ND	96	98	2.1	97	86	12.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	121	110	9.5	111	78	34.9	70 - 130	30	r
Toluene	ND	100	99	1.0	89	83	7.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	115	107	7.2	108	105	2.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	88	90	2.2	74	69	7.0	70 - 130	30	m
trans-1,4-dichloro-2-butene	ND	92	95	3.2	79	74	6.5	70 - 130	30	
Trichloroethene	ND	100	102	2.0	97	92	5.3	70 - 130	30	
Trichlorofluoromethane	ND	130	120	8.0	127	124	2.4	70 - 130	30	
Trichlorotrifluoroethane	ND	121	109	10.4	119	117	1.7	70 - 130	30	
Vinyl chloride	ND	116	110	5.3	119	118	0.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	102	101	1.0	100	99	1.0	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Bromofluorobenzene	91	90	89	1.1	84	87	3.5	70 - 130	30
% Dibromofluoromethane	122	129	126	2.4	130	82	45.3	70 - 130	30
% Toluene-d8	99	101	100	1.0	99	102	3.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201802, QC Sample No: BB92322 (BB91863, BB91864, BB91865)

Chlorinated Herbicides - Soil

2,4,5-T	ND	63	63	0.0	108	119	9.7	40 - 140	30
2,4,5-TP (Silvex)	ND	72	73	1.4	73	73	0.0	40 - 140	30
2,4-D	ND	79	79	0.0	90	97	7.5	40 - 140	30
2,4-DB	ND	68	67	1.5	76	88	14.6	40 - 140	30
Dalapon	ND	66	65	1.5	78	81	3.8	40 - 140	30
Dicamba	ND	76	78	2.6	72	75	4.1	40 - 140	30
Dichloroprop	ND	70	71	1.4	75	78	3.9	40 - 140	30
Dinoseb	ND	75	75	0.0	66	80	19.2	40 - 140	30
% DCAA (Surrogate Rec)	59	65	64	1.6	73	75	2.7	30 - 150	30

QA/QC Batch 201771, QC Sample No: BB92322 (BB91865)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	83	79	4.9	104	114	9.2	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	90	77	15.6	125	136	8.4	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	84	75	61	20.6	82	93	12.6	30 - 150	30
% TCMX (Surrogate Rec)	96	76	71	6.8	66	77	15.4	30 - 150	30

QA/QC Batch 201958, QC Sample No: BB92322 (BB91864, BB91865)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	106	102	3.8	106	105	0.9	70 - 130	30
1,1,1-Trichloroethane	ND	96	96	0.0	98	98	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	91	90	1.1	99	97	2.0	70 - 130	30
1,1,2-Trichloroethane	ND	100	101	1.0	98	96	2.1	70 - 130	30
1,1-Dichloroethane	ND	93	109	15.8	96	97	1.0	70 - 130	30
1,1-Dichloroethene	ND	93	92	1.1	101	101	0.0	70 - 130	30
1,1-Dichloropropene	ND	91	89	2.2	100	99	1.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	82	88	7.1	96	112	15.4	70 - 130	30
1,2,3-Trichloropropane	ND	113	108	4.5	106	87	19.7	70 - 130	30
1,2,4-Trichlorobenzene	ND	73	76	4.0	96	110	13.6	70 - 130	30
1,2,4-Trimethylbenzene	ND	91	86	5.6	103	104	1.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	112	119	6.1	99	105	5.9	70 - 130	30
1,2-Dibromoethane	ND	97	99	2.0	97	95	2.1	70 - 130	30
1,2-Dichlorobenzene	ND	89	87	2.3	101	103	2.0	70 - 130	30
1,2-Dichloroethane	ND	95	97	2.1	97	95	2.1	70 - 130	30
1,2-Dichloropropane	ND	96	96	0.0	98	98	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	94	89	5.5	104	104	0.0	70 - 130	30
1,3-Dichlorobenzene	ND	86	84	2.4	104	104	0.0	70 - 130	30
1,3-Dichloropropane	ND	99	99	0.0	100	99	1.0	70 - 130	30
1,4-Dichlorobenzene	ND	83	81	2.4	102	103	1.0	70 - 130	30

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,2-Dichloropropane	ND	89	89	0.0	94	94	0.0	70 - 130	30	
2-Chlorotoluene	ND	92	88	4.4	103	103	0.0	70 - 130	30	
2-Hexanone	ND	91	90	1.1	53	51	3.8	70 - 130	30	m
2-Isopropyltoluene	ND	97	94	3.1	105	107	1.9	70 - 130	30	
4-Chlorotoluene	ND	85	81	4.8	103	103	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	96	99	3.1	85	83	2.4	70 - 130	30	
Acetone	ND	81	84	3.6	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	101	112	10.3	95	93	2.1	70 - 130	30	
Benzene	ND	95	95	0.0	99	99	0.0	70 - 130	30	
Bromobenzene	ND	97	93	4.2	103	102	1.0	70 - 130	30	
Bromochloromethane	ND	91	90	1.1	94	95	1.1	70 - 130	30	
Bromodichloromethane	ND	98	98	0.0	100	99	1.0	70 - 130	30	
Bromoform	ND	117	119	1.7	109	107	1.9	70 - 130	30	
Bromomethane	ND	84	86	2.4	57	67	16.1	70 - 130	30	m
Carbon Disulfide	ND	97	95	2.1	102	101	1.0	70 - 130	30	
Carbon tetrachloride	ND	100	95	5.1	101	99	2.0	70 - 130	30	
Chlorobenzene	ND	91	90	1.1	103	103	0.0	70 - 130	30	
Chloroethane	ND	95	91	4.3	<40	<40	NC	70 - 130	30	m
Chloroform	ND	93	94	1.1	95	96	1.0	70 - 130	30	
Chloromethane	ND	84	84	0.0	92	95	3.2	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	93	3.3	94	98	4.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	90	91	1.1	97	97	0.0	70 - 130	30	
Dibromochloromethane	ND	107	105	1.9	104	102	1.9	70 - 130	30	
Dibromomethane	ND	97	99	2.0	97	97	0.0	70 - 130	30	
Dichlorodifluoromethane	ND	81	79	2.5	92	96	4.3	70 - 130	30	
Ethylbenzene	ND	96	92	4.3	107	106	0.9	70 - 130	30	
Hexachlorobutadiene	ND	85	88	3.5	102	116	12.8	70 - 130	30	
Isopropylbenzene	ND	96	92	4.3	104	103	1.0	70 - 130	30	
m&p-Xylene	ND	92	90	2.2	107	108	0.9	70 - 130	30	
Methyl ethyl ketone	ND	83	85	2.4	44	44	0.0	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	92	118	24.8	87	107	20.6	70 - 130	30	
Methylene chloride	ND	88	92	4.4	81	82	1.2	70 - 130	30	
Naphthalene	ND	91	114	22.4	89	115	25.5	70 - 130	30	
n-Butylbenzene	ND	84	82	2.4	104	107	2.8	70 - 130	30	
n-Propylbenzene	ND	89	85	4.6	106	106	0.0	70 - 130	30	
o-Xylene	ND	96	94	2.1	106	106	0.0	70 - 130	30	
p-Isopropyltoluene	ND	94	90	4.3	107	108	0.9	70 - 130	30	
sec-Butylbenzene	ND	92	88	4.4	101	102	1.0	70 - 130	30	
Styrene	ND	93	94	1.1	106	107	0.9	70 - 130	30	
tert-Butylbenzene	ND	96	93	3.2	105	106	0.9	70 - 130	30	
Tetrachloroethene	ND	94	89	5.5	105	106	0.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	104	2.9	88	87	1.1	70 - 130	30	
Toluene	ND	93	92	1.1	101	101	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	80	102	24.2	88	110	22.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	93	96	3.2	97	97	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	100	106	5.8	95	97	2.1	70 - 130	30	
Trichloroethene	ND	101	99	2.0	98	99	1.0	70 - 130	30	
Trichlorofluoromethane	ND	103	99	4.0	NC	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	103	100	3.0	105	102	2.9	70 - 130	30	
Vinyl chloride	ND	87	89	2.3	88	89	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	103	102	101	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	100	100	100	0.0	103	100	3.0	70 - 130	30	
% Dibromofluoromethane	97	99	99	0.0	93	95	2.1	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Toluene-d8	105	99	100	1.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201949, QC Sample No: BB92323 (BB91848, BB91849)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	103	97	6.0	100	97	3.0	70 - 130	30	
1,1,1-Trichloroethane	ND	94	100	6.2	119	94	23.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	106	107	0.9	105	105	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	101	97	4.0	98	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	92	115	22.2	123	122	0.8	70 - 130	30	
1,1-Dichloroethene	ND	113	107	5.5	117	120	2.5	70 - 130	30	
1,1-Dichloropropene	ND	91	83	9.2	129	92	33.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	110	112	1.8	104	102	1.9	70 - 130	30	
1,2,3-Trichloropropane	ND	123	125	1.6	121	115	5.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	108	105	2.8	103	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	119	111	7.0	117	115	1.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	110	4.7	89	91	2.2	70 - 130	30	
1,2-Dibromoethane	ND	96	94	2.1	96	93	3.2	70 - 130	30	
1,2-Dichlorobenzene	ND	106	98	7.8	102	106	3.8	70 - 130	30	
1,2-Dichloroethane	ND	95	91	4.3	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	100	95	5.1	100	99	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	121	113	6.8	115	116	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	109	98	10.6	108	110	1.8	70 - 130	30	
1,3-Dichloropropane	ND	105	101	3.9	104	103	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	108	100	7.7	113	112	0.9	70 - 130	30	
2,2-Dichloropropane	ND	94	112	17.5	115	91	23.3	70 - 130	30	
2-Chlorotoluene	ND	110	99	10.5	103	107	3.8	70 - 130	30	
2-Hexanone	ND	67	78	15.2	49	48	2.1	70 - 130	30	l,m
2-Isopropyltoluene	ND	121	109	10.4	117	118	0.9	70 - 130	30	
4-Chlorotoluene	ND	114	103	10.1	119	117	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	82	87	5.9	84	78	7.4	70 - 130	30	
Acetone	ND	91	97	6.4	44	<40	NC	70 - 130	30	m
Acrylonitrile	ND	83	119	35.6	119	110	7.9	70 - 130	30	r
Benzene	ND	105	97	7.9	104	102	1.9	70 - 130	30	
Bromobenzene	ND	113	103	9.3	101	105	3.9	70 - 130	30	
Bromochloromethane	ND	82	115	33.5	121	84	36.1	70 - 130	30	r
Bromodichloromethane	ND	100	90	10.5	95	93	2.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	130	112	14.9	79	96	19.4	70 - 130	30	
Carbon Disulfide	ND	109	104	4.7	103	105	1.9	70 - 130	30	
Carbon tetrachloride	ND	95	110	14.6	111	90	20.9	70 - 130	30	
Chlorobenzene	ND	108	100	7.7	108	111	2.7	70 - 130	30	
Chloroethane	ND	121	109	10.4	<40	<40	NC	70 - 130	30	m
Chloroform	ND	90	111	20.9	118	91	25.8	70 - 130	30	
Chloromethane	ND	97	98	1.0	109	105	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	122	33.5	125	87	35.8	70 - 130	30	r
cis-1,3-Dichloropropene	ND	96	91	5.3	96	95	1.0	70 - 130	30	
Dibromochloromethane	ND	103	99	4.0	98	94	4.2	70 - 130	30	
Dibromomethane	ND	100	93	7.3	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	82	29.2	117	128	9.0	70 - 130	30	
Ethylbenzene	ND	112	101	10.3	109	113	3.6	70 - 130	30	
Hexachlorobutadiene	ND	112	101	10.3	105	110	4.7	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Isopropylbenzene	ND	126	115	9.1	120	128	6.5	70 - 130	30	
m&p-Xylene	ND	117	105	10.8	120	122	1.7	70 - 130	30	
Methyl ethyl ketone	ND	65	74	12.9	57	<40	NC	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	109	105	3.7	109	102	6.6	70 - 130	30	
Methylene chloride	ND	105	99	5.9	111	111	0.0	70 - 130	30	
Naphthalene	ND	105	125	17.4	110	102	7.5	70 - 130	30	
n-Butylbenzene	ND	119	108	9.7	114	118	3.4	70 - 130	30	
n-Propylbenzene	ND	113	103	9.3	108	117	8.0	70 - 130	30	
o-Xylene	ND	108	101	6.7	110	109	0.9	70 - 130	30	
p-Isopropyltoluene	ND	120	108	10.5	112	116	3.5	70 - 130	30	
sec-Butylbenzene	ND	120	108	10.5	117	123	5.0	70 - 130	30	
Styrene	ND	146	130	11.6	144	>150	NC	70 - 130	30	l,m
tert-Butylbenzene	ND	113	103	9.3	105	112	6.5	70 - 130	30	
Tetrachloroethene	ND	105	99	5.9	112	125	11.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	111	26.5	109	84	25.9	70 - 130	30	
Toluene	ND	103	96	7.0	103	104	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	107	4.6	116	115	0.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	93	4.2	96	93	3.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	112	0.0	97	95	2.1	70 - 130	30	
Trichloroethene	ND	101	94	7.2	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	123	117	5.0	82	91	10.4	70 - 130	30	
Trichlorotrifluoroethane	ND	116	111	4.4	116	120	3.4	70 - 130	30	
Vinyl chloride	ND	115	106	8.1	101	106	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	98	100	2.0	94	96	2.1	70 - 130	30	
% Bromofluorobenzene	91	92	91	1.1	90	93	3.3	70 - 130	30	
% Dibromofluoromethane	123	83	127	41.9	123	81	41.2	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 22, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91848	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1700	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2800	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	42.5	0.75	10	10	mg/Kg
BB91849	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1900	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1900	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	17.8	0.74	10	10	mg/Kg
BB91849	MAGU-DAS	SPLPHG	SPLP Mercury	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.0009	0.0004	0.0004	0.0004	mg/L
BB91849	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.019	0.010	0.015	0.015	mg/L
BB91849	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.019	0.010	0.013	0.013	mg/L
BB91850	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	4900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	4900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1100	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	17.9	0.87	10	10	mg/Kg
BB91850	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	483	4.3	400	400	mg/Kg
BB91850	MAGU-DAS	SPLP-AS	SPLP Arsenic	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.005	0.004	0.004	0.004	mg/L
BB91850	MAGU-DAS	SPLPHG	SPLP Mercury	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.0008	0.0004	0.0004	0.0004	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91850	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.103	0.010	0.015	0.015	mg/L
BB91850	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.103	0.010	0.013	0.013	mg/L
BB91851	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	25.0	0.85	10	10	mg/Kg
BB91851	MAGU-DAS	SPLP-AS	SPLP Arsenic	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.007	0.004	0.004	0.004	mg/L
BB91851	MAGU-DAS	SPLPHG	SPLP Mercury	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.0005	0.0004	0.0004	0.0004	mg/L
BB91851	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.089	0.010	0.015	0.015	mg/L
BB91851	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.089	0.010	0.013	0.013	mg/L
BB91852	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2300	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2300	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	10.4	0.73	10	10	mg/Kg
BB91852	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	6180	36	400	400	mg/Kg
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.930	0.010	0.15	0.15	mg/L
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.930	0.010	0.015	0.015	mg/L
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.930	0.010	0.013	0.013	mg/L
BB91853	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	490	140	140	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	11000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	11000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	15000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	13000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	13000	340	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91853	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2800	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	7900	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	7900	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3400	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3400	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1700	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	CT / PESTICIDES, PCB's, TPH, a / RES DEC (mg/kg)	1000	28	500	500	mg/Kg
BB91853	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	76.6	0.99	10	10	mg/Kg
BB91853	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1970	50	400	400	mg/Kg
BB91853	MAGU-DAS	SPLP-AS	SPLP Arsenic	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.005	0.004	0.004	0.004	mg/L
BB91853	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.071	0.010	0.015	0.015	mg/L
BB91853	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.071	0.010	0.013	0.013	mg/L
BB91853	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.55	0.10	0.15	0.15	mg/L
BB91853	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.55	0.10	0.015	0.015	mg/L
BB91853	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.55	0.10	0.013	0.013	mg/L
BB91854	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2300	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2300	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1100	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1100	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	20.4	0.78	10	10	mg/Kg
BB91854	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.046	0.010	0.015	0.015	mg/L
BB91854	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.046	0.010	0.013	0.013	mg/L
BB91855	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1900	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1900	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2400	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2600	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2600	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	260	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91855	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1500	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	25.6	0.80	10	10	mg/Kg
BB91855	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1910	40	400	400	mg/Kg
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.193	0.010	0.15	0.15	mg/L
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.193	0.010	0.015	0.015	mg/L
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.193	0.010	0.013	0.013	mg/L
BB91855	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	2.78	0.10	0.15	0.15	mg/L
BB91855	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	2.78	0.10	0.015	0.015	mg/L
BB91855	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	2.78	0.10	0.013	0.013	mg/L
BB91856	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2700	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2700	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	22.7	0.80	10	10	mg/Kg
BB91856	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1150	4.0	400	400	mg/Kg
BB91856	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.090	0.010	0.015	0.015	mg/L
BB91856	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.090	0.010	0.013	0.013	mg/L
BB91856	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.22	0.10	0.15	0.15	mg/L
BB91856	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.22	0.10	0.015	0.015	mg/L
BB91856	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.22	0.10	0.013	0.013	mg/L
BB91857	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5400	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5600	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5600	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1100	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3100	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3100	290	1000	1000	ug/Kg

Sample Criteria Exceedences Report

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	22.8	0.83	10	10	mg/Kg
BB91857	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	424	4.2	400	400	mg/Kg
BB91857	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.071	0.010	0.015	0.015	mg/L
BB91857	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.071	0.010	0.013	0.013	mg/L
BB91858	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2400	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2200	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2200	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1300	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	20.8	0.88	10	10	mg/Kg
BB91858	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1360	44	400	400	mg/Kg
BB91858	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.016	0.010	0.015	0.015	mg/L
BB91858	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.016	0.010	0.013	0.013	mg/L
BB91858	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	1.20	0.10	0.15	0.15	mg/L
BB91858	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	1.20	0.10	0.015	0.015	mg/L
BB91858	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	1.20	0.10	0.013	0.013	mg/L
BB91859	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3100	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3100	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	38.2	0.84	10	10	mg/Kg
BB91860	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3800	290	1000	1000	ug/Kg

Sample Criteria Exceedences Report

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91860	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	28.5	0.82	10	10	mg/Kg
BB91860	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.017	0.010	0.015	0.015	mg/L
BB91860	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.017	0.010	0.013	0.013	mg/L
BB91861	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2100	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2100	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3200	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3000	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3000	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	26.4	0.83	10	10	mg/Kg
BB91861	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.017	0.010	0.015	0.015	mg/L
BB91861	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.017	0.010	0.013	0.013	mg/L
BB91862	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	4100	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	4100	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5800	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5900	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5900	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3000	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3000	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	22.7	0.83	10	10	mg/Kg
BB91862	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1300	41	400	400	mg/Kg
BB91862	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.064	0.010	0.015	0.015	mg/L
BB91862	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.064	0.010	0.013	0.013	mg/L
BB91862	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.36	0.10	0.15	0.15	mg/L
BB91862	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.36	0.10	0.015	0.015	mg/L
BB91862	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.36	0.10	0.013	0.013	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91863	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Carbazole	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	1200	600	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	7400	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	7400	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	10000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	10000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5800	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5800	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	CT / PESTICIDES, PCB's, TPH, a / RES DEC (mg/kg)	680	24	500	500	mg/Kg
BB91863	MAGU-DAS	$PEST_SMR	Dieldrin	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	30	6.0	7	7	ug/Kg
BB91863	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	52.1	0.83	10	10	mg/Kg
BB91863	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1620	42	400	400	mg/Kg
BB91863	MAGU-DAS	SPLP-AS	SPLP Arsenic	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.009	0.004	0.004	0.004	mg/L
BB91863	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.106	0.010	0.015	0.015	mg/L
BB91863	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.106	0.010	0.013	0.013	mg/L
BB91863	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.53	0.10	0.15	0.15	mg/L
BB91863	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.53	0.10	0.015	0.015	mg/L
BB91863	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.53	0.10	0.013	0.013	mg/L
BB91864	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	430	140	140	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5100	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5100	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	6300	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	6200	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	6200	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3800	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3800	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1500	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	15.1	0.87	10	10	mg/Kg
BB91864	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.065	0.010	0.015	0.015	mg/L
BB91864	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.065	0.010	0.013	0.013	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91865	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	28.7	0.81	10	10	mg/Kg
BB91865	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GWPC (µg/L)	0.021	0.010	0.015	0.015	mg/L
BB91865	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / SWPC (µg/L)	0.021	0.010	0.013	0.013	mg/L
BB91866	MAGU-DAS	$8260GWR	Acrylonitrile	CT / VOLATILE ORGANIC COMPOUND / GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB91866	MAGU-DAS	$8260GWR	1,2-Dibromoethane	CT / VOLATILE ORGANIC COMPOUND / GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB91866	MAGU-DAS	$8270-SIMFSR	Aniline	CT / SEMIVOLATILE ORGANIC COMP / GWPC (µg/L)	ND	10	6	6	ug/L
BB91866	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / GWPC (µg/L)	ND	50	10	10	ug/L
BB91867	MAGU-DAS	$8260GWR	Acrylonitrile	CT / VOLATILE ORGANIC COMPOUND / GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB91867	MAGU-DAS	$8260GWR	1,2-Dibromoethane	CT / VOLATILE ORGANIC COMPOUND / GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866, BB91867

Sampling Date(s): 5/30/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, PCB Narration, PEST Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Friday, June 22, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
Sample BB91866: Field Blank
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWPC criteria.

8270 Semi-volatile Organics: (Soils)
Pyridine reporting levels do not meet GBPM criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 06/01/12-1 (BB91866)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid1 06/01/12-2 (BB91848, BB91850, BB91860, BB91861, BB91862, BB91864)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid1 06/04/12-1 (BB91863)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

Instrument: Au-fid84 06/01/12-1 (BB91865)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 06/01/12-2 (BB91852, BB91854, BB91855, BB91856)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 06/04/12-1 (BB91853)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

Instrument: Au-xl1 06/01/12-1 (BB91849)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-xl1 06/01/12-2 (BB91851, BB91857, BB91858, BB91859)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01692 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB91160, QA/QC Batch: 201692 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB91843, QA/QC Batch: 201767 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

---------- Sample No: BB92175, QA/QC Batch: 201772 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201715 (Samples: BB91866): -----

The LCS/LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-DB)

The LCS and/or the LCSD recovery is below the method criteria. A low bias is likely. (Dinoseb)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Dinoseb)

QC Batch 201689 (Samples: BB91866): -----

The LCS/LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-DB)

Instrument: Au-ecd14 06/04/12-1 (BB91866)

Initial Calibration ECD14-060412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01715 05/31/12 (BB91866)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

QC (Batch Specific)

---------- Sample No: BB90671, QA/QC Batch: 201715 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(30%)

All LCSD recoveries were within 40 - 140 with the following exceptions: 2,4-DB(29%), Dinoseb(8.4%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Dinoseb(148.6%)

---------- Sample No: BB91709, QA/QC Batch: 201689 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(36%)

---------- Sample No: BB92322, QA/QC Batch: 201802 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 6/1/2012

Instrument: Merlin 06/04/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	6/4/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91851, QA/QC Batch: 201812 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91409, QA/QC Batch: 201811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91818, QA/QC Batch: 201810 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB92463, QA/QC Batch: 201905 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB92592, QA/QC Batch: 201906 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp10 06/19/12-1 (BB91853, BB91855, BB91856, BB91858)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/19/2012

Instrument: Icp10 06/20/12-1 (BB91853, BB91855, BB91856, BB91858, BB91862, BB91863)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/20/2012

Instrument: Icp10 06/21/12-1 (BB91862, BB91863)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Printed Name Laura Kinnin
Position: Chemist
Date: 6/21/2012

Instrument: Icp9 05/31/12-1 (BB91848)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/31/2012

Instrument: Icp9 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/04/12-1 (BB91848, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01783 05/31/12 (BB91866)

MSD not reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91848, QA/QC Batch: 201816 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91863, QA/QC Batch: 203131 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91864, QA/QC Batch: 201778 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB87384, QA/QC Batch: 201777 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91408, QA/QC Batch: 203126 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92040, QA/QC Batch: 201783 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201500 (Samples: BB91866): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant bias is suspected.(% DCBP (Surrogate Rec))

Instrument: Au-ecd35 06/01/12-1 (BB91866)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 6/1/2012

Instrument: Au-ecd5 06/02/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Printed Name Michael Hahn
Position: Chemist
Date: 6/2/2012

Instrument: Au-ecd7 06/01/12-1 (BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01500 05/25/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

The DCBP surrogate in the LCS sample was low. All other components were within control. No bias is suspected.

QC (Batch Specific)

---------- Sample No: BB90474, QA/QC Batch: 201500 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % DCBP (Surrogate Rec)(48.7%)

---------- Sample No: BB91709, QA/QC Batch: 201675 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

---------- Sample No: BB92322, QA/QC Batch: 201771 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201667 (Samples: BB91866): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (4,4'' -DDT, Endrin aldehyde)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,4'' -DDE, a-Chlordane, Endosulfan I, Endrin)

QC Batch 201770 (Samples: BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,4'' -DDD)

Instrument: Au-ecd13 06/01/12-1 (BB91848, BB91849, BB91859)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

Instrument: Au-ecd4 06/03/12-1 (BB91851, BB91852, BB91853, BB91854)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Au-ecd4 06/04/12-1 (BB91860)

8081 Narration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01667 05/30/12 (BB91866)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB91025, QA/QC Batch: 201667 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 4,4' -DDT(>130%), Endrin aldehyde(>130%)

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Endosulfan I(37.7%)

---------- Sample No: BB91709, QA/QC Batch: 201677 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92069, QA/QC Batch: 201770 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,4' -DDD(45.4%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201687 (Samples: BB91866): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline,Pentachloronitrobenzene)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes. This analyte is not reported. No variability is suspected.(Pyridine)

QC Batch 201690 (Samples: BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Pyridine)

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, Pentachloronitrobenzene)

QC Batch 201769 (Samples: BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (4,6-Dinitro-2-methylphenoll)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,6-Dinitro-2-methylphenol)

The LCS and/orLCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, Pentachloronitrobenzene)

Instrument: Chem09 05/31/12-2 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the

initial calibration: Benzaldehyde, Bis(2-chloroethyl)ether, Bis(2-chloroisopropyl)ether, Caprolactam, 3-Nitroaniline, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 5/31/2012

Instrument: Chem09 06/03/12-1 (BB91864)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Chem09 06/05/12-1 (BB91866)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate

Printed Name Damien Drobinski
Position: Chemist
Date: 6/5/2012

Instrument: Chem12 06/03/12-1 (BB91853, BB91863)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0603):

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 3&4-methylphenol (m&p-cresol), 2-nitrophenol, 2-nitroaniline, 4,6-dinitro-2-methylphenol, Benzyl Butyl Phthalate

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

QC Comments: QC Batch 01687 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

QC (Batch Specific)

---------- Sample No: BB91005, QA/QC Batch: 201687 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(149%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(141%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: Pyridine(40.9%)

---------- Sample No: BB91709, QA/QC Batch: 201690 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Pyridine(34.0%)

---------- Sample No: BB92183, QA/QC Batch: 201769 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(18%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(94.1%)

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 06/01/12-1 (BB91866)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0531):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

had RSDs >20% and <0.99 correlation coefficient: 1,2,4,5-Tetrachlorobenzene

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration:

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01687 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201949 (Samples: BB91848, BB91849): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria.Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS and or LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone, Methyl ethyl ketone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

The LCS and/or LCSDrecovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201951 (Samples: BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863): -----

The LCS and/or LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone, Methyl ethyl ketone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Acrylonitrile, Bromoform, Bromomethane , Styrene)

QC Batch 201972 (Samples: BB91866, BB91867): -----

The LCS and/or CSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane, Bromomethane , Styrene, Dichlorodifluoromethane, Ethylbenzene,)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Hexanone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Bromomethane)

QC Batch 202022 (Samples: BB91855, BB91856, BB91857, BB91858, BB91859): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Bromomethane, Bromoform, Styrene)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, 2-

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Hexanone, Acetone, Bromodichloromethane, Bromoform, Carbon tetrachloride, Chloroethane, Dibromochloromethane, Methyl ethyl ketone, trans-1,3-Dichloropropene, trans-1,4-dichloro-2-butene)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

QC Batch 202097 (Samples: BB91860, BB91862): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (1,1-Dichloropropene, 2,2-Dichloropropane, Acrylonitrile, Bromochloromethane, Chloroform, cis-1,2-Dichloroethene, Methyl ethyl ketone, Tetrahydrofuran (THF))

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Methyl ethyl ketone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (1,2-Dibromo-3-chloropropane)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (2-Hexanone, Acetone, Acrylonitrile)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

Instrument: Chem03 06/01/12-1 (BB91864, BB91865)

Initial Calibration Verification (RCPS_0531):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Methyl Ethyl Ketone, 2-hexanone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%:

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem08 05/30/12-3 (BB91866, BB91867)

S -Side
Initial Calibration(RCPS_0529:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, Trans-1,4-dichloro-2-butene

Continuing Calibration Verification:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: trans-1,4-Dichloro-2-butene Bromomethane, 2,2-Dichloropropane, Tetrahydrofuran (THF), Styrene

Printed Name Tina Covensky
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 06/01/12-1 (BB91848, BB91849)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem11 06/01/12-2 (BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Tetrahydrofuran (THF), 2-Hexanone, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem11 06/04/12-1 (BB91855, BB91856, BB91857, BB91858, BB91859)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Styrene, Bromoform

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

Printed Name Johanna Harrington
Position: Chemist
Date: 6/4/2012

Instrument: Chem11 06/05/12-2 (BB91860, BB91862)

Initial Calibration Verification (CHEM11/RCPS_0605):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: 1,1-dichloroethane, Acrylonitrile, Cis-1,2-dichloroethene, 2,2-dichloropropane, Tetrahydrofuran (thf), Methyl Ethyl Ketone, Bromochloromethane, 1,1-dichloropropene, 1,1,1,2-tetrachloroethane, Styrene, Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Trans-1,4-dichloro-2-butene, 1,2,4-trimethylbenzene, Sec-butylbenzene, 2-isopropyltoluene, N-butylbenzene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:

Printed Name Johanna Harrington
Position: Chemist
Date: 6/5/2012

QC Comments: QC Batch 01972 06/04/12 (BB91866, BB91867)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 02097 06/06/12 (BB91860, BB91862)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91855, QA/QC Batch: 202022 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Bromomethane(133%), Styrene(147%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Styrene(145%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(42.7%), Bromochloromethane(34.1%), cis-1,2-Dichloroethene(32.6%)

All MS recoveries were within 70 - 130 with the following exceptions: 1,1,1,2-Tetrachloroethane(52%), 1,1,1-Trichloroethane(69%), 1,2-Dibromo-3-chloropropane(57%), 2,2-Dichloropropane(60%), 2-Hexanone(47%), Acetone(<40%), Bromodichloromethane(69%), Bromoform(69%), Carbon tetrachloride(43%), Chloroethane(<40%), Dibromochloromethane(52%), Methyl ethyl ketone(40%), Styrene(143%), trans-1,3-Dichloropropene(61%), trans-1,4-dichloro-2-butene(<40%)

All MSD recoveries were within 70 - 130 with the following exceptions: 1,1,1,2-Tetrachloroethane(54%), 1,2-Dibromo-3-chloropropane(63%), 2-Hexanone(48%), Acetone(41%), Bromodichloromethane(68%), Chloroethane(<40%), Dibromochloromethane(52%), Methyl ethyl ketone(54%), Styrene(144%), trans-1,3-Dichloropropene(63%), trans-1,4-dichloro-2-butene(43%)

All MS/MSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(42.4%), 1,1,1-Trichloroethane(33.7%), 1,1-Dichloropropene(38.5%), 2,2-Dichloropropane(40.0%), Acrylonitrile(33.3%), Bromochloromethane(36.6%), Carbon tetrachloride(47.8%), cis-1,2-Dichloroethene(35.5%)

---------- Sample No: BB91862, QA/QC Batch: 202097 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2-Dibromo-3-chloropropane(135%), Bromoform(>150%), Styrene(148%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Methyl ethyl ketone(69%), Styrene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(46.5%), 1,1-Dichloropropene(33.8%), Acrylonitrile(44.4%), Bromochloromethane(43.8%), cis-1,2-Dichloroethene(38.8%), Methyl ethyl ketone(39.5%), Tetrahydrofuran (THF)(36.4%)

All MS recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Styrene(134%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(64%), Acetone(65%), Acrylonitrile(67%), Bromoform(>150%), Methyl ethyl ketone(56%), Styrene(138%)

All MS/MSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(44.0%), Acrylonitrile(38.6%), Bromochloromethane(36.2%), cis-1,2-Dichloroethene(37.5%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91269, QA/QC Batch: 201972 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%), 2-Hexanone(133%), Bromomethane(41%), Dichlorodifluoromethane(67%), Ethylbenzene(69%), Styrene(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Bromomethane(62%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91848

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromomethane(40.8%)

---------- Sample No: BB92297, QA/QC Batch: 201951 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(45%), Acrylonitrile(133%), Bromoform(>150%), Bromomethane(132%), Methyl ethyl ketone(58%), Styrene(135%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(60%), Bromoform(>150%), Styrene(134%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92322, QA/QC Batch: 201958 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92323, QA/QC Batch: 201949 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%), Bromoform(>150%), Methyl ethyl ketone(65%), Styrene(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.9%), Acrylonitrile(35.6%), Bromochloromethane(33.5%), cis-1,2-Dichloroethene(33.5%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

o Wilcepail

CHAIN OF CUSTODY RECORD

Temp 6 Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: MetroNorth Railroad Catenary
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: Cindy Yt Date: 5-30-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification		Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals					Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91848	GP-16	1-3'	S	5-30-12	8:07am	X	X	X	X	X	X	X					3	2								
91849	GP-17	1-3'			8:41am																					
91850	GP-18	1-3'			9:18am																					
91851	GP-19	1-3'			9:39am																					
91852	GP-23	2-4'			10:09am													1	1							
91853	GP-24	1-3'			10:43am																					
91854	GP-25	1-3'			11:04am																					
91855	GP-26	1-3'			11:31am																					
91856	GP-27	1-3'			11:56am																					
91857	GP-28	2-4'			12:39pm																					
91858	GP-29	1-3'			1:14pm																					
91859	GP-30	1-3'			1:40pm																					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

010/1 repeat

CHAIN OF CUSTODY RECORD

Temp 6 Pg 2 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-30-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Soil VOA Vials [ ] methanol [2] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91860	GP-31 1-3'	S	5-30-12	1:54pm	X	X	X	X	X	X	X	3	1	1							
91861	GP-32 1-3'	↓	↓	2:06pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91862	GP-33 1-3'	↓	↓	2:19pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91863	GP-34 1-3'	↓	↓	2:38pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91864	GP-35 1-3'	↓	↓	2:49pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91865	GP-36 1-3'	↓	↓	3:00pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91866	FB-3	GW	↓	4:40pm	↓	↓	↓	↓	↓	↓	↓				3	6			1		
91867	TB-16	GW	↓	–	↓										2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☒ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

o Wicepaul

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 0 Pg 1 of 2

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: MetroNorth Railroad Cafenary
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: Cindy Yf Date: 5-30-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification		Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals						Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8 oz	GL Soil container (4 oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91848	GB-16	1-3'	S	5-30-12	8:07am	X	X	X	X	X	X	X						3	2								
91849	GB-17	1-3'			8:41am																						
91850	GB-18	1-3'			9:18am																						
91851	GB-19	1-3'			9:29am																						
91852	GB-23	2-4'			10:09am								X						1	1							
91853	GB-24	1-3'			10:43am								X														
91854	GB-25	1-3'			11:04am																						
91855	GB-26	1-3'			11:31am								X														
91856	GB-27	1-3'			11:51am								X														
91857	GB-28	2-4'			12:39pm																						
91858	GB-29	1-3'			1:14pm								X														
91859	GB-30	1-3'			1:40pm																						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:
Additional Analyses per J. Witherell 6/19/12

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

GW | Lepek

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 2 of 2

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Cateniary
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-30-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT EPH	PCBs + Pesticides	Herbicides	Total 8151	Stl & RCRA 8 Metals	ACLP RCRA 8 Metals	Soil VOA Vials (methanol (2) H2O	GL Soil container (2) oz	GL Soil container (4) oz	40 ml VOA Vial	GL Amber 1000ml	PL As is	PL H2SO4 1000ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91860	GP-31 1-3'	S	5-30-12	1:54pm	X	X	X	X	X	X	X			3	1	1						
91861	GP-32 1-3'			2:06pm																		
91862	GP-33 1-3'			2:19pm							X											
91863	GP-34 1-3'			2:38pm							X											
91864	GP-35 1-3'			2:49pm																		
91865	GP-36 1-3'			3:08pm																		
91866	FB-3	GW		4:46pm													3	6		1		
91867	TB-16	GW		—													2					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:
additional Analysis per J. Witherell 6/1/12

Turnaround:
☐ 1 Day*
☐ 2 Days*
☒ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☒ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

State where samples were collected: CT

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Friday, June 22, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB91406, BB91408

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

SDG Comments

June 22, 2012

SDG I.D.: GBB91404

BB91407 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	10:51
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91406

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	SW6010
Arsenic	51.0	0.77	mg/Kg	06/01/12		EK	SW6010
Barium	52.1	0.39	mg/Kg	06/01/12		EK	SW6010
Cadmium	1.21	0.39	mg/Kg	06/01/12		EK	SW6010
Chromium	89.1	0.39	mg/Kg	06/01/12		EK	SW6010
Mercury	0.57	0.15	mg/Kg	05/31/12		RS	SW-7471
Lead	4950	39	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	SW6010
SPLP Barium	0.013	0.010	mg/L	05/31/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	SW6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.147	0.010	mg/L	06/04/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	SW6010
TCLP Lead	17.4	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	83		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	160	24	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	98		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	67		%	05/31/12		MH	30 - 150 %
% TCMX	66		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	38	38	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	98		%	06/01/12		KCA	30 - 150 %
% TCMX	63		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromoethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	6.1	ug/Kg	06/01/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	93		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	102		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	1000	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	590	280	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	500	280	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	1800	280	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	1600	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	3600	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	770	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	1000	280	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	2500	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	350	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	350	280	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	3300	280	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	800	280	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	720	280	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	2400	280	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	2700	280	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	82		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	87		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	67		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	11:54
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91408

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-13 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	06/01/12		EK	SW6010
Arsenic	8.91	0.71	mg/Kg	06/01/12		EK	SW6010
Barium	36.3	0.36	mg/Kg	06/01/12		EK	SW6010
Cadmium	< 0.36	0.36	mg/Kg	06/01/12		EK	SW6010
Chromium	122	0.36	mg/Kg	06/01/12		EK	SW6010
Mercury	0.14	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1880	36	mg/Kg	06/04/12		EK	SW6010
Selenium	< 1.4	1.4	mg/Kg	06/01/12		EK	SW6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	SW6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	SW6010
SPLP Barium	0.042	0.010	mg/L	05/31/12		EK	SW6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	SW6010
SPLP Chromium	0.025	0.010	mg/L	05/31/12		EK	SW6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.444	0.010	mg/L	05/31/12		EK	SW6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	SW6010
TCLP Lead	3.96	0.10	mg/L	06/20/12		EK	SW6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
TCLP Metals Digestion	Completed			06/20/12		X/X	SW3005
Percent Solid	90		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
TCLP Extraction for Metals	Completed			06/19/12		X	EPA 1311
Field Extraction	Completed			05/29/12		JW	SW5035
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	86		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	11	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	90		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	80		%	05/31/12		MH	30 - 150 %
% TCMX	85		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	35	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
Endrin aldehyde	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	91		%	06/01/12		KCA	30 - 150 %
% TCMX	91		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromoethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	5.3	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
Chloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	82		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	101		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dinitrophenol	ND	590	ug/Kg	06/05/12		DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	06/05/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Chloronaphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Methylphenol (o-cresol)	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	06/05/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	06/05/12		DD	SW 8270
3-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/05/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	06/05/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Acenaphthene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Acetophenone	ND	260	ug/Kg	06/05/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Azobenzene	ND	370	ug/Kg	06/05/12		DD	SW 8270
Benz(a)anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	06/05/12		DD	SW 8270
Benzo(a)pyrene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(b)fluoranthene	340	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(ghi)perylene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(k)fluoranthene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	06/05/12		DD	SW 8270
Chrysene	350	260	ug/Kg	06/05/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Dibenzofuran	ND	260	ug/Kg	06/05/12		DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Fluoranthene	320	260	ug/Kg	06/05/12		DD	SW 8270
Fluorene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	06/05/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Isophorone	ND	260	ug/Kg	06/05/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
Naphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	06/05/12		DD	SW 8270
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	06/05/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	06/05/12		DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	06/05/12		DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	06/05/12		DD	SW 8270
Phenanthrene	330	260	ug/Kg	06/05/12		DD	SW 8270
Phenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
Pyrene	320	260	ug/Kg	06/05/12		DD	SW 8270
Pyridine	ND	370	ug/Kg	06/05/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	06/05/12		DD	15 - 130 %
% 2-Fluorobiphenyl	82		%	06/05/12		DD	15 - 130 %
% 2-Fluorophenol	87		%	06/05/12		DD	15 - 130 %
% Nitrobenzene-d5	92		%	06/05/12		DD	15 - 130 %
% Phenol-d5	84		%	06/05/12		DD	15 - 130 %
% Terphenyl-d14	80		%	06/05/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 22, 2012

Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 22, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201639, QC Sample No: BB90808 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.004	0.004	NC	104	106	1.9	108	104	3.8	75 - 125	20	
Barium	BDL	0.023	0.023	NC	102	104	1.9	105	102	2.9	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	106	108	1.9	109	106	2.8	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	101	104	2.9	105	102	2.9	75 - 125	20	
Lead	BDL	0.019	0.019	NC	101	103	2.0	104	101	2.9	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	107	108	0.9	110	109	0.9	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	99.9	101	1.1	104	100	3.9	75 - 125	20	
QA/QC Batch 201720, QC Sample No: BB91030 (BB91404, BB91405, BB91406, BB91407)													
Mercury - Soil	BDL	0.55	0.37	NC	97.0	105	7.9	83.0	69.7	17.4	70 - 130	30	m
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201722, QC Sample No: BB91197 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Water	BDL	0.0004	0.0003	NC	93.0	93.8	0.9	92.2	87.9	4.8	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 203126, QC Sample No: BB91408 (BB91406, BB91408)													
ICP Metals - TCLP Extraction													
Lead	BDL	3.96	4.52	13.2	94.3	96.2	2.0	101	103	2.0	75 - 125	20	
QA/QC Batch 201811, QC Sample No: BB91409 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Soil	BDL	0.83	0.39	72.1	111	108	2.7	NR	NR	NC	70 - 130	30	r
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201676, QC Sample No: BB91705 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - Soil													
Arsenic	BDL	3.86	3.95	NC	86.2	87.0	0.9	90.8	90.6	0.2	75 - 125	30	
Barium	BDL	76.7	77.4	0.90	101	99.3	1.7	NC	NC	NC	75 - 125	30	
Cadmium	BDL	0.27	0.52	NC	88.8	88.3	0.6	91.7	91.8	0.1	75 - 125	30	
Chromium	BDL	17.2	15.5	10.4	92.7	93.6	1.0	101	102	1.0	75 - 125	30	
Lead	BDL	158	152	3.90	88.5	90.3	2.0	NC	NC	NC	75 - 125	30	
Selenium	BDL	<1.6	<1.7	NC	89.4	90.0	0.7	81.7	82.4	0.9	75 - 125	30	
Silver	BDL	<0.41	<0.42	NC	89.8	90.9	1.2	95.6	95.5	0.1	75 - 125	30	
QA/QC Batch 202564, QC Sample No: BB97075 (BB91407, BB91409, BB91411, BB91412)													
ICP Metals - TCLP Extraction													
Lead	BDL	0.54	0.58	7.10	100	97.0	3.0	103	102	1.0	75 - 125	20	

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 202680, QC Sample No: BB97989 (BB91413)												
ICP Metals - TCLP Extraction												
Lead	BDL	0.0335	<0.10	NC	102	100	2.0	101	99.1	1.9	75 - 125	20

m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 22, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201595, QC Sample No: BB90234 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	45	35	25.0				40 - 140	30	l
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	41	34	18.7				40 - 140	30	l
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	104	37	31	17.6				30 - 150	30	
% TCMX (Surrogate Rec)	91	40	33	19.2				30 - 150	30	
QA/QC Batch 201579, QC Sample No: BB90759 (BB91404, BB91405)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	115	92	22.2	84	93	10.2	50 - 150	30	
% n-Pentacosane	66	107	89	18.4	76	83	8.8	50 - 150	30	
QA/QC Batch 201601, QC Sample No: BB91037 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	82	82	0.0	76	81	6.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	85	86	1.2	85	84	1.2	40 - 140	30	
2,4-D	ND	95	93	2.1	99	106	6.8	40 - 140	30	
2,4-DB	ND	60	57	5.1	65	63	3.1	40 - 140	30	
Dalapon	ND	54	62	13.8	Intf	Intf	NC	40 - 140	30	
Dicamba	ND	116	105	10.0	117	111	5.3	40 - 140	30	
Dichloroprop	ND	85	85	0.0	75	74	1.3	40 - 140	30	
Dinoseb	ND	70	78	10.8	69	68	1.5	40 - 140	30	
% DCAA (Surrogate Rec)	83	72	72	0.0	74	72	2.7	30 - 150	30	
QA/QC Batch 201594, QC Sample No: BB91093 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	83	81	2.4	83	82	1.2	30 - 130	30	
1,2,4-Trichlorobenzene	ND	77	76	1.3	78	78	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	77	77	0.0	79	79	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	75	75	0.0	76	77	1.3	30 - 130	30	
1,4-Dichlorobenzene	ND	76	76	0.0	77	77	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	86	87	1.2	95	95	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	83	82	1.2	94	94	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	86	85	1.2	91	91	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	69	62	10.7	72	70	2.8	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	18	11	48.3	30 - 130	30	l,m,r

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	90	89	1.1	95	94	1.1	30 - 130	30	
2,6-Dinitrotoluene	ND	89	88	1.1	95	95	0.0	30 - 130	30	
2-Chloronaphthalene	ND	81	81	0.0	85	86	1.2	30 - 130	30	
2-Chlorophenol	ND	79	79	0.0	85	85	0.0	30 - 130	30	
2-Methylnaphthalene	ND	80	81	1.2	83	82	1.2	30 - 130	30	
2-Methylphenol (o-cresol)	ND	80	80	0.0	84	84	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	77	74	4.0	92	91	1.1	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	80	80	0.0	87	86	1.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	8.5	8.2	3.6	71	49	36.7	30 - 130	30	l,r
4-Bromophenyl phenyl ether	ND	85	85	0.0	89	89	0.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	88	85	3.5	94	93	1.1	30 - 130	30	
4-Chloroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	86	85	1.2	89	90	1.1	30 - 130	30	
4-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4-Nitrophenol	ND	86	83	3.6	99	96	3.1	30 - 130	30	
Acenaphthene	ND	80	80	0.0	85	85	0.0	30 - 130	30	
Acenaphthylene	ND	83	83	0.0	88	88	0.0	30 - 130	30	
Acetophenone	ND	78	77	1.3	83	83	0.0	30 - 130	30	
Aniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Anthracene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Azobenzene	ND	80	79	1.3	87	89	2.3	30 - 130	30	
Benz(a)anthracene	ND	87	87	0.0	95	95	0.0	30 - 130	30	
Benzidine	ND	41	43	4.8	24	33	31.6	30 - 130	30	m,r
Benzo(a)pyrene	ND	82	82	0.0	91	91	0.0	30 - 130	30	
Benzo(b)fluoranthene	ND	88	89	1.1	101	103	2.0	30 - 130	30	
Benzo(ghi)perylene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Benzo(k)fluoranthene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Benzyl butyl phthalate	ND	84	84	0.0	96	96	0.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	82	80	2.5	87	89	2.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	72	72	0.0	79	80	1.3	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	77	77	0.0	90	94	4.3	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	82	82	0.0	93	95	2.1	30 - 130	30	
Carbazole	ND	117	113	3.5	129	129	0.0	30 - 130	30	
Chrysene	ND	84	84	0.0	91	91	0.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	95	93	2.1	84	91	8.0	30 - 130	30	
Dibenzofuran	ND	83	83	0.0	87	88	1.1	30 - 130	30	
Diethyl phthalate	ND	86	88	2.3	90	92	2.2	30 - 130	30	
Dimethylphthalate	ND	85	84	1.2	89	90	1.1	30 - 130	30	
Di-n-butylphthalate	ND	82	82	0.0	87	89	2.3	30 - 130	30	
Di-n-octylphthalate	ND	85	86	1.2	95	99	4.1	30 - 130	30	
Fluoranthene	ND	86	85	1.2	94	94	0.0	30 - 130	30	
Fluorene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Hexachlorobenzene	ND	82	82	0.0	89	89	0.0	30 - 130	30	
Hexachlorobutadiene	ND	81	78	3.8	81	81	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	85	81	4.8	63	34	59.8	30 - 130	30	r
Hexachloroethane	ND	80	75	6.5	79	78	1.3	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Isophorone	ND	83	82	1.2	87	89	2.3	30 - 130	30	
Naphthalene	ND	78	97	21.7	81	82	1.2	30 - 130	30	
Nitrobenzene	ND	79	79	0.0	86	87	1.2	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
N-Nitrosodimethylamine	ND	83	75	10.1	84	80	4.9	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	81	77	5.1	85	79	7.3	30 - 130	30	
N-Nitrosodiphenylamine	ND	108	107	0.9	111	112	0.9	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	27	26	3.8	87	84	3.5	30 - 130	30	l
Phenanthrene	ND	85	85	0.0	94	94	0.0	30 - 130	30	
Phenol	ND	80	81	1.2	87	87	0.0	30 - 130	30	
Pyrene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Pyridine	ND	63	65	3.1	67	68	1.5	30 - 130	30	
% 2,4,6-Tribromophenol	73	84	82	2.4	99	101	2.0	15 - 130	30	
% 2-Fluorobiphenyl	65	78	78	0.0	82	83	1.2	30 - 130	30	
% 2-Fluorophenol	64	76	77	1.3	83	83	0.0	15 - 130	30	
% Nitrobenzene-d5	69	80	80	0.0	87	87	0.0	30 - 130	30	
% Phenol-d5	66	79	80	1.3	86	85	1.2	15 - 130	30	
% Terphenyl-d14	76	90	89	1.1	91	91	0.0	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201947, QC Sample No: BB91147 (BB91412)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	96	99	3.1	93	89	4.4	70 - 130	30	
1,1,1-Trichloroethane	ND	95	118	21.6	93	110	16.7	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	95	100	5.1	104	104	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	100	102	2.0	98	92	6.3	70 - 130	30	
1,1-Dichloroethane	ND	95	122	24.9	92	113	20.5	70 - 130	30	
1,1-Dichloroethene	ND	113	109	3.6	112	107	4.6	70 - 130	30	
1,1-Dichloropropene	ND	89	122	31.3	90	84	6.9	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	94	103	9.1	92	106	14.1	70 - 130	30	
1,2,3-Trichloropropane	ND	114	121	6.0	111	113	1.8	70 - 130	30	
1,2,4-Trichlorobenzene	ND	92	94	2.2	98	104	5.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	109	109	0.0	110	105	4.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	90	99	9.5	83	91	9.2	70 - 130	30	
1,2-Dibromoethane	ND	95	95	0.0	96	92	4.3	70 - 130	30	
1,2-Dichlorobenzene	ND	98	96	2.1	100	99	1.0	70 - 130	30	
1,2-Dichloroethane	ND	93	96	3.2	96	91	5.3	70 - 130	30	
1,2-Dichloropropane	ND	100	101	1.0	100	94	6.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	111	109	1.8	112	105	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	98	95	3.1	102	97	5.0	70 - 130	30	
1,3-Dichloropropane	ND	100	104	3.9	101	95	6.1	70 - 130	30	
1,4-Dichlorobenzene	ND	100	96	4.1	104	99	4.9	70 - 130	30	
2,2-Dichloropropane	ND	94	115	20.1	86	103	18.0	70 - 130	30	
2-Chlorotoluene	ND	101	97	4.0	104	96	8.0	70 - 130	30	
2-Hexanone	ND	60	68	12.5	43	45	4.5	70 - 130	30	l,m
2-Isopropyltoluene	ND	112	108	3.6	108	102	5.7	70 - 130	30	
4-Chlorotoluene	ND	103	100	3.0	109	103	5.7	70 - 130	30	
4-Methyl-2-pentanone	ND	80	87	8.4	75	79	5.2	70 - 130	30	
Acetone	ND	95	104	9.0	46	40	14.0	70 - 130	30	m
Acrylonitrile	ND	87	121	32.7	83	113	30.6	70 - 130	30	r
Benzene	ND	101	103	2.0	102	97	5.0	70 - 130	30	
Bromobenzene	ND	103	101	2.0	106	99	6.8	70 - 130	30	
Bromochloromethane	ND	86	120	33.0	85	118	32.5	70 - 130	30	r
Bromodichloromethane	ND	95	95	0.0	94	90	4.3	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromoform	ND	148	>150	NC	141	139	1.4	70 - 130	30	l,m
Bromomethane	ND	137	122	11.6	81	71	13.2	70 - 130	30	l
Carbon Disulfide	ND	108	105	2.8	95	90	5.4	70 - 130	30	
Carbon tetrachloride	ND	91	107	16.2	83	102	20.5	70 - 130	30	
Chlorobenzene	ND	102	100	2.0	105	98	6.9	70 - 130	30	
Chloroethane	ND	125	115	8.3	84	44	62.5	70 - 130	30	m,r
Chloroform	ND	93	119	24.5	90	111	20.9	70 - 130	30	
Chloromethane	ND	100	103	3.0	95	97	2.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	124	31.8	87	119	31.1	70 - 130	30	r
cis-1,3-Dichloropropene	ND	93	96	3.2	92	90	2.2	70 - 130	30	
Dibromochloromethane	ND	95	97	2.1	88	87	1.1	70 - 130	30	
Dibromomethane	ND	95	99	4.1	96	92	4.3	70 - 130	30	
Dichlorodifluoromethane	ND	110	93	16.7	102	91	11.4	70 - 130	30	
Ethylbenzene	ND	106	100	5.8	107	97	9.8	70 - 130	30	
Hexachlorobutadiene	ND	99	93	6.3	102	105	2.9	70 - 130	30	
Isopropylbenzene	ND	119	113	5.2	119	109	8.8	70 - 130	30	
m&p-Xylene	ND	111	106	4.6	113	102	10.2	70 - 130	30	
Methyl ethyl ketone	ND	69	94	30.7	<40	46	NC	70 - 130	30	l,m,r
Methyl t-butyl ether (MTBE)	ND	106	111	4.6	101	101	0.0	70 - 130	30	
Methylene chloride	ND	105	106	0.9	103	101	2.0	70 - 130	30	
Naphthalene	ND	100	116	14.8	94	111	16.6	70 - 130	30	
n-Butylbenzene	ND	106	100	5.8	110	103	6.6	70 - 130	30	
n-Propylbenzene	ND	104	97	7.0	111	101	9.4	70 - 130	30	
o-Xylene	ND	106	102	3.8	103	97	6.0	70 - 130	30	
p-Isopropyltoluene	ND	110	104	5.6	108	101	6.7	70 - 130	30	
sec-Butylbenzene	ND	110	104	5.6	115	105	9.1	70 - 130	30	
Styrene	ND	140	135	3.6	137	123	10.8	70 - 130	30	l,m
tert-Butylbenzene	ND	106	100	5.8	106	99	6.8	70 - 130	30	
Tetrachloroethene	ND	101	98	3.0	NC	NC	NC	70 - 130	30	
Tetrahydrofuran (THF)	ND	82	111	30.1	83	105	23.4	70 - 130	30	
Toluene	ND	102	101	1.0	103	94	9.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	109	2.7	110	107	2.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	94	96	2.1	95	93	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	104	5.9	87	86	1.2	70 - 130	30	
Trichloroethene	ND	102	100	2.0	100	92	8.3	70 - 130	30	
Trichlorofluoromethane	ND	125	121	3.3	108	102	5.7	70 - 130	30	
Trichlorotrifluoroethane	ND	117	111	5.3	113	104	8.3	70 - 130	30	
Vinyl chloride	ND	117	112	4.4	106	98	7.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	97	100	3.0	98	99	1.0	70 - 130	30	
% Bromofluorobenzene	91	92	89	3.3	93	90	3.3	70 - 130	30	
% Dibromofluoromethane	119	82	125	41.5	79	125	45.1	70 - 130	30	r
% Toluene-d8	99	99	99	0.0	100	96	4.1	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201972, QC Sample No: BB91269 (BB91414)

Volatiles - Water

1,1,1,2-Tetrachloroethane	ND	90	95	5.4	94	94	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	97	104	7.0	105	101	3.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	122	118	3.3	120	115	4.3	70 - 130	30	
1,1,2-Trichloroethane	ND	105	105	0.0	104	100	3.9	70 - 130	30	
1,1-Dichloroethane	ND	102	109	6.6	110	105	4.7	70 - 130	30	
1,1-Dichloroethene	ND	88	94	6.6	101	96	5.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	109	116	6.2	116	109	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	114	112	1.8	102	101	1.0	70 - 130	30	
1,2,3-Trichloropropane	ND	106	106	0.0	107	107	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	111	111	0.0	105	102	2.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	108	111	2.7	109	103	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	110	108	1.8	102	98	4.0	70 - 130	30	
1,2-Dibromoethane	ND	105	104	1.0	106	101	4.8	70 - 130	30	
1,2-Dichlorobenzene	ND	93	93	0.0	93	90	3.3	70 - 130	30	
1,2-Dichloroethane	ND	121	123	1.6	128	121	5.6	70 - 130	30	
1,2-Dichloropropane	ND	108	113	4.5	113	107	5.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	108	105	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	103	100	3.0	70 - 130	30	
1,3-Dichloropropane	ND	125	121	3.3	120	118	1.7	70 - 130	30	
1,4-Dichlorobenzene	ND	77	83	7.5	85	83	2.4	70 - 130	30	
2,2-Dichloropropane	ND	65	68	4.5	54	51	5.7	70 - 130	30	l,m
2-Chlorotoluene	ND	111	111	0.0	111	106	4.6	70 - 130	30	
2-Hexanone	ND	133	127	4.6	124	122	1.6	70 - 130	30	l
2-Isopropyltoluene	ND	99	104	4.9	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	105	107	1.9	109	104	4.7	70 - 130	30	
4-Methyl-2-pentanone	ND	118	113	4.3	109	107	1.9	70 - 130	30	
Acetone	ND	125	111	11.9	124	122	1.6	70 - 130	30	
Acrylonitrile	ND	111	113	1.8	112	101	10.3	70 - 130	30	
Benzene	ND	106	112	5.5	112	105	6.5	70 - 130	30	
Bromobenzene	ND	115	117	1.7	114	108	5.4	70 - 130	30	
Bromochloromethane	ND	96	100	4.1	101	97	4.0	70 - 130	30	
Bromodichloromethane	ND	102	106	3.8	109	103	5.7	70 - 130	30	
Bromoform	ND	76	75	1.3	76	75	1.3	70 - 130	30	
Bromomethane	ND	41	62	40.8	84	87	3.5	70 - 130	30	l,r
Carbon Disulfide	ND	89	96	7.6	98	94	4.2	70 - 130	30	
Carbon tetrachloride	ND	102	107	4.8	113	107	5.5	70 - 130	30	
Chlorobenzene	ND	77	83	7.5	86	83	3.6	70 - 130	30	
Chloroethane	ND	90	101	11.5	115	103	11.0	70 - 130	30	
Chloroform	ND	101	104	2.9	108	103	4.7	70 - 130	30	
Chloromethane	ND	89	95	6.5	116	111	4.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	96	103	7.0	100	97	3.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Dibromochloromethane	ND	116	112	3.5	115	109	5.4	70 - 130	30	
Dibromomethane	ND	101	108	6.7	112	107	4.6	70 - 130	30	
Dichlorodifluoromethane	ND	67	71	5.8	108	105	2.8	70 - 130	30	l
Ethylbenzene	ND	69	74	7.0	73	71	2.8	70 - 130	30	l
Hexachlorobutadiene	ND	99	104	4.9	91	93	2.2	70 - 130	30	
Isopropylbenzene	ND	105	109	3.7	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	77	81	5.1	81	79	2.5	70 - 130	30	
Methyl ethyl ketone	ND	96	101	5.1	123	124	0.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	110	106	3.7	70 - 130	30	
Methylene chloride	ND	79	83	4.9	85	82	3.6	70 - 130	30	
Naphthalene	ND	127	124	2.4	116	115	0.9	70 - 130	30	
n-Butylbenzene	ND	106	109	2.8	104	101	2.9	70 - 130	30	
n-Propylbenzene	ND	95	98	3.1	99	96	3.1	70 - 130	30	
o-Xylene	ND	78	80	2.5	80	77	3.8	70 - 130	30	
p-Isopropyltoluene	ND	110	115	4.4	106	104	1.9	70 - 130	30	
sec-Butylbenzene	ND	99	103	4.0	103	100	3.0	70 - 130	30	
Styrene	ND	69	71	2.9	68	67	1.5	70 - 130	30	l,m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
tert-Butylbenzene	ND	106	109	2.8	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	106	111	4.6	110	106	3.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	117	123	5.0	117	118	0.9	70 - 130	30	
Toluene	ND	97	102	5.0	100	94	6.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	92	99	7.3	102	97	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	95	1.0	94	88	6.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	90	13.5	90	98	8.5	70 - 130	30	
Trichloroethene	ND	96	102	6.1	100	94	6.2	70 - 130	30	
Trichlorofluoromethane	ND	97	107	9.8	111	105	5.6	70 - 130	30	
Trichlorotrifluoroethane	ND	80	89	10.7	86	84	2.4	70 - 130	30	
Vinyl chloride	ND	86	94	8.9	110	105	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	104	101	2.9	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	103	118	117	0.9	117	118	0.9	70 - 130	30	
% Dibromofluoromethane	88	88	89	1.1	88	89	1.1	70 - 130	30	
% Toluene-d8	102	102	103	1.0	102	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201678, QC Sample No: BB91410 (BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	66	72	8.7	92	78	16.5	50 - 150	30	
% n-Pentacosane	71	77	81	5.1	99	86	14.1	50 - 150	30	

QA/QC Batch 201943, QC Sample No: BB91644 (BB91404, BB91405, BB91406)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	104	102	1.9	99	104	4.9	70 - 130	30	
1,1,1-Trichloroethane	ND	101	98	3.0	99	115	15.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	90	84	6.9	95	100	5.1	70 - 130	30	
1,1,2-Trichloroethane	ND	103	97	6.0	100	105	4.9	70 - 130	30	
1,1-Dichloroethane	ND	98	117	17.7	97	130	29.1	70 - 130	30	
1,1-Dichloroethene	ND	100	93	7.3	98	107	8.8	70 - 130	30	
1,1-Dichloropropene	ND	96	94	2.1	97	110	12.6	70 - 130	30	
1,2,3-Trichlorobenzene	ND	82	92	11.5	87	102	15.9	70 - 130	30	
1,2,3-Trichloropropane	ND	112	87	25.1	103	91	12.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	74	81	9.0	86	99	14.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	89	91	2.2	96	101	5.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	111	105	5.6	94	103	9.1	70 - 130	30	
1,2-Dibromoethane	ND	104	96	8.0	99	104	4.9	70 - 130	30	
1,2-Dichlorobenzene	ND	90	88	2.2	95	99	4.1	70 - 130	30	
1,2-Dichloroethane	ND	102	97	5.0	99	106	6.8	70 - 130	30	
1,2-Dichloropropane	ND	100	98	2.0	100	103	3.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	91	93	2.2	96	100	4.1	70 - 130	30	
1,3-Dichlorobenzene	ND	87	87	0.0	95	101	6.1	70 - 130	30	
1,3-Dichloropropane	ND	100	94	6.2	97	101	4.0	70 - 130	30	
1,4-Dichlorobenzene	ND	84	84	0.0	94	99	5.2	70 - 130	30	
2,2-Dichloropropane	ND	90	95	5.4	90	110	20.0	70 - 130	30	
2-Chlorotoluene	ND	93	91	2.2	95	101	6.1	70 - 130	30	
2-Hexanone	ND	67	69	2.9	53	55	3.7	70 - 130	30	l,m
2-Isopropyltoluene	ND	93	97	4.2	98	103	5.0	70 - 130	30	
4-Chlorotoluene	ND	89	86	3.4	95	100	5.1	70 - 130	30	
4-Methyl-2-pentanone	ND	96	90	6.5	91	95	4.3	70 - 130	30	
Acetone	ND	75	80	6.5	<40	<40	NC	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acrylonitrile	ND	102	117	13.7	98	138	33.9	70 - 130	30	m,r
Benzene	ND	99	98	1.0	98	106	7.8	70 - 130	30	
Bromobenzene	ND	97	95	2.1	94	102	8.2	70 - 130	30	
Bromochloromethane	ND	98	93	5.2	96	112	15.4	70 - 130	30	
Bromodichloromethane	ND	105	99	5.9	98	105	6.9	70 - 130	30	
Bromoform	ND	114	104	9.2	95	104	9.0	70 - 130	30	
Bromomethane	ND	93	90	3.3	44	57	25.7	70 - 130	30	m
Carbon Disulfide	ND	102	97	5.0	92	101	9.3	70 - 130	30	
Carbon tetrachloride	ND	106	98	7.8	95	113	17.3	70 - 130	30	
Chlorobenzene	ND	95	92	3.2	98	101	3.0	70 - 130	30	
Chloroethane	ND	103	92	11.3	<40	<40	NC	70 - 130	30	m
Chloroform	ND	98	97	1.0	97	115	17.0	70 - 130	30	
Chloromethane	ND	95	85	11.1	84	92	9.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	95	96	1.0	95	118	21.6	70 - 130	30	
cis-1,3-Dichloropropene	ND	98	94	4.2	93	99	6.3	70 - 130	30	
Dibromochloromethane	ND	107	100	6.8	94	99	5.2	70 - 130	30	
Dibromomethane	ND	103	97	6.0	99	104	4.9	70 - 130	30	
Dichlorodifluoromethane	ND	98	84	15.4	76	90	16.9	70 - 130	30	
Ethylbenzene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
Hexachlorobutadiene	ND	84	93	10.2	94	107	12.9	70 - 130	30	
Isopropylbenzene	ND	95	95	0.0	96	104	8.0	70 - 130	30	
m&p-Xylene	ND	93	94	1.1	100	102	2.0	70 - 130	30	
Methyl ethyl ketone	ND	75	76	1.3	47	55	15.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	96	114	17.1	91	124	30.7	70 - 130	30	r
Methylene chloride	ND	93	91	2.2	93	104	11.2	70 - 130	30	
Naphthalene	ND	89	109	20.2	82	114	32.7	70 - 130	30	r
n-Butylbenzene	ND	80	88	9.5	94	101	7.2	70 - 130	30	
n-Propylbenzene	ND	91	88	3.4	96	103	7.0	70 - 130	30	
o-Xylene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
p-Isopropyltoluene	ND	87	94	7.7	98	103	5.0	70 - 130	30	
sec-Butylbenzene	ND	92	91	1.1	98	104	5.9	70 - 130	30	
Styrene	ND	93	95	2.1	101	103	2.0	70 - 130	30	
tert-Butylbenzene	ND	96	95	1.0	98	104	5.9	70 - 130	30	
Tetrachloroethene	ND	94	93	1.1	100	102	2.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	91	10.4	95	107	11.9	70 - 130	30	
Toluene	ND	99	98	1.0	99	104	4.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	86	103	18.0	86	117	30.5	70 - 130	30	
trans-1,3-Dichloropropene	ND	99	95	4.1	93	102	9.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	92	96	4.3	79	90	13.0	70 - 130	30	
Trichloroethene	ND	107	103	3.8	96	102	6.1	70 - 130	30	
Trichlorofluoromethane	ND	105	101	3.9	<40	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	100	100	0.0	104	113	8.3	70 - 130	30	
Vinyl chloride	ND	97	91	6.4	80	86	7.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	100	100	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	97	101	101	0.0	103	101	2.0	70 - 130	30	
% Dibromofluoromethane	96	100	99	1.0	96	108	11.8	70 - 130	30	
% Toluene-d8	105	101	101	0.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201689, QC Sample No: BB91709 (BB91404)

Chlorinated Herbicides - Soil

2,4,5-T	ND	43			39	38	2.6	40 - 140	30

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2,4,5-TP (Silvex)	ND	41			40	40	0.0	40 - 140	30
2,4-D	ND	49			46	46	0.0	40 - 140	30
2,4-DB	ND	36			34	34	0.0	40 - 140	30
Dalapon	ND	43			45	45	0.0	40 - 140	30
Dicamba	ND	46			47	46	2.2	40 - 140	30
Dichloroprop	ND	43			39	41	5.0	40 - 140	30
Dinoseb	ND	42			43	45	4.5	40 - 140	30
% DCAA (Surrogate Rec)	70	41			40	41	2.5	30 - 150	30

QA/QC Batch 201677, QC Sample No: BB91709 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Pesticides - Soil

4,4' -DDD	ND	88	86	2.3	89	79	11.9	40 - 140	30
4,4' -DDE	ND	74	79	6.5	83	71	15.6	40 - 140	30
4,4' -DDT	ND	76	77	1.3	79	75	5.2	40 - 140	30
a-BHC	ND	85	85	0.0	90	88	2.2	40 - 140	30
a-Chlordane	ND	86	85	1.2	89	84	5.8	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	86	85	1.2	91	88	3.4	40 - 140	30
b-BHC	ND	83	83	0.0	83	81	2.4	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	85	84	1.2	83	82	1.2	40 - 140	30
Dieldrin	ND	88	88	0.0	93	87	6.7	40 - 140	30
Endosulfan I	ND	90	93	3.3	102	92	10.3	40 - 140	30
Endosulfan II	ND	66	66	0.0	88	82	7.1	40 - 140	30
Endosulfan sulfate	ND	81	73	10.4	91	88	3.4	40 - 140	30
Endrin	ND	94	93	1.1	96	92	4.3	40 - 140	30
Endrin aldehyde	ND	63	65	3.1	90	86	4.5	40 - 140	30
Endrin ketone	ND	89	89	0.0	95	90	5.4	40 - 140	30
g-BHC	ND	85	84	1.2	89	86	3.4	40 - 140	30
g-Chlordane	ND	83	81	2.4	84	80	4.9	40 - 140	30
Heptachlor	ND	87	87	0.0	90	89	1.1	40 - 140	30
Heptachlor epoxide	ND	85	84	1.2	90	83	8.1	40 - 140	30
Methoxychlor	ND	80	78	2.5	81	75	7.7	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	91	96	77	22.0	95	70	30.3	30 - 150	30
% TCMX	86	92	92	0.0	94	91	3.2	30 - 150	30

QA/QC Batch 201675, QC Sample No: BB91709 (BB91412, BB91413)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	88			70	87	21.7	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	89			74	94	23.8	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	63	77			61	79	25.7	30 - 150	30
% TCMX (Surrogate Rec)	49	72			63	79	22.5	30 - 150	30

QA/QC Data

SDG I.D.: GBB91404

QA/QC Batch 201949, QC Sample No: BB92323 (BB91407)

Volatiles - Soil

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	103	97	6.0	100	97	3.0	70 - 130	30	
1,1,1-Trichloroethane	ND	94	100	6.2	119	94	23.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	106	107	0.9	105	105	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	101	97	4.0	98	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	92	115	22.2	123	122	0.8	70 - 130	30	
1,1-Dichloroethene	ND	113	107	5.5	117	120	2.5	70 - 130	30	
1,1-Dichloropropene	ND	91	83	9.2	129	92	33.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	110	112	1.8	104	102	1.9	70 - 130	30	
1,2,3-Trichloropropane	ND	123	125	1.6	121	115	5.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	108	105	2.8	103	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	119	111	7.0	117	115	1.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	110	4.7	89	91	2.2	70 - 130	30	
1,2-Dibromoethane	ND	96	94	2.1	96	93	3.2	70 - 130	30	
1,2-Dichlorobenzene	ND	106	98	7.8	102	106	3.8	70 - 130	30	
1,2-Dichloroethane	ND	95	91	4.3	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	100	95	5.1	100	99	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	121	113	6.8	115	116	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	109	98	10.6	108	110	1.8	70 - 130	30	
1,3-Dichloropropane	ND	105	101	3.9	104	103	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	108	100	7.7	113	112	0.9	70 - 130	30	
2,2-Dichloropropane	ND	94	112	17.5	115	91	23.3	70 - 130	30	
2-Chlorotoluene	ND	110	99	10.5	103	107	3.8	70 - 130	30	
2-Hexanone	ND	67	78	15.2	49	48	2.1	70 - 130	30	l,m
2-Isopropyltoluene	ND	121	109	10.4	117	118	0.9	70 - 130	30	
4-Chlorotoluene	ND	114	103	10.1	119	117	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	82	87	5.9	84	78	7.4	70 - 130	30	
Acetone	ND	91	97	6.4	44	<40	NC	70 - 130	30	m
Acrylonitrile	ND	83	119	35.6	119	110	7.9	70 - 130	30	r
Benzene	ND	105	97	7.9	104	102	1.9	70 - 130	30	
Bromobenzene	ND	113	103	9.3	101	105	3.9	70 - 130	30	
Bromochloromethane	ND	82	115	33.5	121	84	36.1	70 - 130	30	r
Bromodichloromethane	ND	100	90	10.5	95	93	2.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	130	112	14.9	79	96	19.4	70 - 130	30	
Carbon Disulfide	ND	109	104	4.7	103	105	1.9	70 - 130	30	
Carbon tetrachloride	ND	95	110	14.6	111	90	20.9	70 - 130	30	
Chlorobenzene	ND	108	100	7.7	108	111	2.7	70 - 130	30	
Chloroethane	ND	121	109	10.4	<40	<40	NC	70 - 130	30	m
Chloroform	ND	90	111	20.9	118	91	25.8	70 - 130	30	
Chloromethane	ND	97	98	1.0	109	105	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	122	33.5	125	87	35.8	70 - 130	30	r
cis-1,3-Dichloropropene	ND	96	91	5.3	96	95	1.0	70 - 130	30	
Dibromochloromethane	ND	103	99	4.0	98	94	4.2	70 - 130	30	
Dibromomethane	ND	100	93	7.3	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	82	29.2	117	128	9.0	70 - 130	30	
Ethylbenzene	ND	112	101	10.3	109	113	3.6	70 - 130	30	
Hexachlorobutadiene	ND	112	101	10.3	105	110	4.7	70 - 130	30	
Isopropylbenzene	ND	126	115	9.1	120	128	6.5	70 - 130	30	
m&p-Xylene	ND	117	105	10.8	120	122	1.7	70 - 130	30	
Methyl ethyl ketone	ND	65	74	12.9	57	<40	NC	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	109	105	3.7	109	102	6.6	70 - 130	30	
Methylene chloride	ND	105	99	5.9	111	111	0.0	70 - 130	30	
Naphthalene	ND	105	125	17.4	110	102	7.5	70 - 130	30	
n-Butylbenzene	ND	119	108	9.7	114	118	3.4	70 - 130	30	
n-Propylbenzene	ND	113	103	9.3	108	117	8.0	70 - 130	30	
o-Xylene	ND	108	101	6.7	110	109	0.9	70 - 130	30	
p-Isopropyltoluene	ND	120	108	10.5	112	116	3.5	70 - 130	30	
sec-Butylbenzene	ND	120	108	10.5	117	123	5.0	70 - 130	30	
Styrene	ND	146	130	11.6	144	>150	NC	70 - 130	30	l,m
tert-Butylbenzene	ND	113	103	9.3	105	112	6.5	70 - 130	30	
Tetrachloroethene	ND	105	99	5.9	112	125	11.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	111	26.5	109	84	25.9	70 - 130	30	
Toluene	ND	103	96	7.0	103	104	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	107	4.6	116	115	0.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	93	4.2	96	93	3.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	112	0.0	97	95	2.1	70 - 130	30	
Trichloroethene	ND	101	94	7.2	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	123	117	5.0	82	91	10.4	70 - 130	30	
Trichlorotrifluoroethane	ND	116	111	4.4	116	120	3.4	70 - 130	30	
Vinyl chloride	ND	115	106	8.1	101	106	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	98	100	2.0	94	96	2.1	70 - 130	30	
% Bromofluorobenzene	91	92	91	1.1	90	93	3.3	70 - 130	30	
% Dibromofluoromethane	123	83	127	41.9	123	81	41.2	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 22, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91404	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1600	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3400	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2500	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	51.0	0.77	10	10	mg/Kg
BB91406	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	4950	39	400	400	mg/Kg
BB91406	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	17.4	0.10	0.15	0.15	mg/L
BB91406	MAGU-DAS	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	17.4	0.10	5	5	mg/L
BB91407	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	19.2	0.76	10	10	mg/Kg
BB91407	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	3130	38	400	400	mg/Kg
BB91407	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	1.50	0.010	0.15	0.15	mg/L
BB91407	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	5.06	0.10	0.15	0.15	mg/L
BB91407	MAGU-DAS	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	5.06	0.10	5	5	mg/L

Sample Criteria Exceedences Report

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91408	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91408	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1880	36	400	400	mg/Kg
BB91408	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.444	0.010	0.15	0.15	mg/L
BB91408	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	3.96	0.10	0.15	0.15	mg/L
BB91409	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	6100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	6100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	8100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3400	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	114	0.86	10	10	mg/Kg
BB91409	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	5730	43	400	400	mg/Kg
BB91409	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	14.8	0.10	0.15	0.15	mg/L
BB91409	MAGU-DAS	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	14.8	0.10	5	5	mg/L
BB91410	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1500	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	19.1	0.72	10	10	mg/Kg
BB91411	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2100	140	140	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Aniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6000	1200	1200	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachloroethane	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Nitrobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	400	400	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3300	2800	2800	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3300	1650	1650	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2100	1400	1400	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Pentachlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Carbazole	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	3100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	15000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	1400	330	330	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	6000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	CT / PESTICIDES, PCB's, TPH, a / RES DEC (mg/kg)	910	25	500	500	mg/Kg
BB91411	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	33.9	0.77	10	10	mg/Kg
BB91411	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	20700	390	400	400	mg/Kg
BB91411	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	1.15	0.010	0.15	0.15	mg/L
BB91411	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	38.2	1.0	0.15	0.15	mg/L
BB91411	MAGU-DAS	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	38.2	1.0	5	5	mg/L
BB91412	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3900	140	140	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3900	2400	2400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Aniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	11000	1200	1200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg

Sample Criteria Exceedences Report

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachloroethane	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Nitrobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	400	400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	4-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6300	2800	2800	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6300	1650	1650	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	6300	4100	4100	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3900	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Pentachlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Carbazole	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	5900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	110000	2700	56000	56000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	110000	2700	40000	40000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	51000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2700	330	330	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	20000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	20000	2700	8400	8400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	23	13	13	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor epoxide	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	37	20	20	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Dieldrin	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	12	7	7	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Chlordane	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	120	66	66	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91412	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	11.4	0.78	10	10	mg/Kg
BB91412	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	1400	3.9	400	400	mg/Kg
BB91412	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.756	0.010	0.15	0.15	mg/L
BB91412	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	0.87	0.10	0.15	0.15	mg/L
BB91413	MAGU-DAS	$8270-SMR	Pyridine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	4100	140	140	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	4100	2400	2400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Aniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	12000	1200	1200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachloroethane	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Nitrobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	400	400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	4-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6500	2800	2800	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	6500	1650	1650	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	6500	4100	4100	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	4100	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Pentachlorophenol	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Carbazole	CT / PESTICIDES, PCB's, TPH, a / GB PMC (mg/kg)	ND	6100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Chrysene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	21000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	330	330	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	9300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	9300	2800	8400	8400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	16000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	16000	2800	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	CT / PESTICIDES, PCB's, TPH, a / RES DEC (mg/kg)	1200	60	500	500	mg/Kg
BB91413	MAGU-DAS	AS-SM	Arsenic	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	28.0	0.83	10	10	mg/Kg
BB91413	MAGU-DAS	PB-SM	Lead	CT / INORGANIC SUBSTANCES / RES DEC (mg/kg)	14600	42	400	400	mg/Kg
BB91413	MAGU-DAS	SPLP-PB	SPLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	3.22	0.10	0.15	0.15	mg/L
BB91413	MAGU-DAS	TCLP-PB	TCLP Lead	CT / INORGANIC SUBSTANCES / GB PMC (mg/l)**	44.7	1.0	0.15	0.15	mg/L
BB91413	MAGU-DAS	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	44.7	1.0	5	5	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413, BB91414

Sampling Date(s): 5/29/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: PCB Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Friday, June 22, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine reporting levels do not meet GBPM criteria.

Not all constituents met requested criteria due to the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/31/12-1 (BB91404, BB91408, BB91410)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Instrument: Au-fid1 06/01/12-2 (BB91405, BB91413)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 05/31/12-1 (BB91412)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

Instrument: Au-xl1 06/01/12-2 (BB91406, BB91407, BB91409, BB91411)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

QC (Site Specific)

---------- Sample No: BB91410, QA/QC Batch: 201678 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB90759, QA/QC Batch: 201579 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/31/12-1 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Initial Calibration ECD14-061712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

QC (Batch Specific)

---------- Sample No: BB91037, QA/QC Batch: 201601 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201689 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(36%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/31/2012

Instrument: Merlin 06/01/12-1 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	6/1/2012

QC (Site Specific)

---------- Sample No: BB91409, QA/QC Batch: 201811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91030, QA/QC Batch: 201720 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91197, QA/QC Batch: 201722 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/31/2012

Instrument: Icp10 06/01/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp10 06/19/12-1 (BB91406, BB91408)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/19/2012

Instrument: Icp10 06/20/12-1 (BB91406, BB91408)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/20/2012

Instrument: Icp9 06/01/12-1 (BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/04/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/4/2012

Instrument: Icp9 06/14/12-1 (BB91407, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/14/2012

Instrument: Icp9 06/15/12-1 (BB91407, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/15/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

QC (Site Specific)

---------- Sample No: BB91408, QA/QC Batch: 203126 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB90808, QA/QC Batch: 201639 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91705, QA/QC Batch: 201676 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB97075, QA/QC Batch: 202564 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB97989, QA/QC Batch: 202680 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201595 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411): -----

The LCS and/or the LCSD recovery is below range. A low bias is possible. (PCB-1016, PCB-1260)

Instrument: Au-ecd8 05/29/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/29/2012

QC (Batch Specific)

---------- Sample No: BB90234, QA/QC Batch: 201595 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: PCB-1016(35%), PCB-1260(34%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201675 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91410, BB91411, BB91413)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/31/2012

Instrument: Au-ecd4 06/04/12-1 (BB91412)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/4/2012

QC (Batch Specific)

---------- Sample No: BB91709, QA/QC Batch: 201677 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201594 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413): -----

The LCS/LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pentachlorophenol)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, 4-Chloroaniline, Aniline, Pentachloronitrobenzene)

Instrument: Chem09 05/31/12-1 (BB91404, BB91405, BB91406, BB91409, BB91410)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, Bis(2-chloroisopropyl)ether, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Bis(2-ethylhexyl)phthalate, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/31/2012

Instrument: Chem09 06/01/12-2 (BB91411, BB91412, BB91413)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration:

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

Instrument: Chem09 06/03/12-1 (BB91407, BB91412)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

Instrument: Chem09 06/05/12-1 (BB91408)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate

Printed Name Damien Drobinski
Position: Chemist
Date: 6/5/2012

Instrument: Chem12 06/03/12-1 (BB91409)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0603):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 3&4-methylphenol (m&p-cresol), 2-nitrophenol, 2-nitroaniline, 4,6-dinitro-2-methylphenol, Benzyl Butyl Phthalate

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB91093, QA/QC Batch: 201594 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.5%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(27%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.2%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(26%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201943 (Samples: BB91404, BB91405, BB91406): -----

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2-Hexanone)

QC Batch 201947 (Samples: BB91412): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Methyl ethyl ketone, 2-Hexanone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (1,1-Dichloropropene, Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene, Methyl ethyl ketone, Tetrahydrofuran (THF))

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201949 (Samples: BB91407): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (2-Hexanone, Methyl ethyl ketone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201972 (Samples: BB91414): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (Styrene)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

significant bias is suspected. (2-Hexanone)

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichlorodifluoromethane, Ethylbenzene)

The LCS/LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Bromomethane)

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane)

Instrument: Chem03 05/31/12-2 (BB91404, BB91405, BB91406)

Initial Calibration Verification (RCPS_0531):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Methyl Ethyl Ketone, 2-hexanone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: 2-Hexanone

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem08 05/30/12-3 (BB91414)

S -Side
Initial Calibration(RCPS_0529:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, Trans-1,4-dichloro-2-butene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: trans-1,4-Dichloro-2-butene Bromomethane, 2,2-Dichloropropane, Tetrahydrofuran (THF), Styrene

Printed Name Tina Covensky
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/30/12-3 (BB91408, BB91409, BB91410, BB91411, BB91413)

Initial Calibration Verification (CHEM11/RCPS_0525A):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/31/12-2 (BB91412)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Chloroethane, Methyl Ethyl Ketone, 2-Hexanone, Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem11 06/01/12-1 (BB91407)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01972 06/04/12 (BB91414)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 22, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB91147, QA/QC Batch: 201947 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(60%), Bromoform(148%), Bromomethane(137%), Methyl ethyl ketone(69%), Styrene(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(68%), Bromoform(>150%), Styrene(135%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.5%), 1,1-Dichloropropene(31.3%), Acrylonitrile(32.7%), Bromochloromethane(33.0%), cis-1,2-Dichloroethene(31.8%), Methyl ethyl ketone(30.7%)

---------- Sample No: BB91269, QA/QC Batch: 201972 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%), 2-Hexanone(133%), Bromomethane(41%), Dichlorodifluoromethane(67%), Ethylbenzene(69%), Styrene(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Bromomethane(62%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromomethane(40.8%)

---------- Sample No: BB91644, QA/QC Batch: 201943 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(69%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92323, QA/QC Batch: 201949 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%), Bromoform(>150%), Methyl ethyl ketone(65%), Styrene(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.9%), Acrylonitrile(35.6%), Bromochloromethane(33.5%), cis-1,2-Dichloroethene(33.5%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

6° w/c + IP

CHAIN OF CUSTODY RECORD

Temp

Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-29-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SGLP RCRA 8 Metals	Soil VOA Vials (1 methanol 2 H2O)	GL Soil container (6) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2'-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X	2	2								
91405	GP-10 1'-3'			10:15am								3									
91406	GP-11 1'-3'			10:51am																	
91407	GP-12 1'-3'			11:14am																	
91408	GP-13 1'-3'			11:54am																	
91409	GP-14 1'-3'			12:11pm																	
91410	GP-15 1'-3'			12:43pm																	
91411	GP-20 1'-3'			12:55																	
91412	GP-21 1'-3'			1:20pm																	
91413	GP-22 1'-3'			1:49pm																	
91414	TB-15	GW		—											2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/30/12	11:30
[signature]	Caleb Githinji		
Caleb Githinji	Aparadise	5/30/12	1520

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

6° w/c + IP

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: PAS Contract - CDOT c/o MET

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Sampler's Signature: [signature] Date: 5-29-12

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request:

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT EPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SCL RCRA 8 Metals	TCLP Lead	Soil VOA Vials (1) methanol (2) H2O	GL Soil container (3) 1 oz	GL Soil container ( ) 1 oz	40 ml VOA Vial ( ) As is ( ) HCl	GL Amber 1000ml ( ) As is ( ) H2SO4	PL As is ( ) 250ml ( ) 500ml ( ) 1000ml	PL H2SO4 ( ) 250ml ( ) 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2'-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X						2	2				
91405	GP-10 1'-3'			10:15am													3					
91406	GP-11 1'-3'			10:51am																		
91407	GP-12 1'-3'			11:14am								X										
91408	GP-13 1'-3'			11:54am																		
91409	GP-14 1'-3'			12:11pm								X										
91410	GP-15 1'-3'			12:43pm																		
91411	GP-20 1'-3'			12:55								X										
91412	GP-21 1'-3'			1:20pm																		
91413	GP-22 1'-3'			1:49pm								X										
91414	TB-15	GW		—												2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/30/12	11:30
[signature]	Caleb Githinji		
Caleb Githinji	Paracelsus	5/30/12	1520

Comments, Special Requirements or Regulations:
Additional Analysis per J. Witherell 6/13/12

Turnaround:
☐ 1 Day*
☐ 2 Days*
☒ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

Linda - Phoenixlabs

From: Jane Witherell [JWitherell@maguiregroup.com]
Sent: Wednesday, June 13, 2012 11:49 AM
To: Linda - Phoenixlabs
Cc: David Stock
Subject: Additional Analysis Request - MN Catenary Project
Attachments: COC_Additional Analysis_061312.pdf

Linda,

Attached is the COC for the additional analysis (TCLP Lead) for the marked soil samples.

Thanks,
Jane

Jane Witherell, PE, LEP, CHMM
Principal Engineer
MAGUIRE GROUP INC.

2080 Silas Deane Highway
Rocky Hill, CT 06067
860.224.9141 - Ext. 3012
860.224.9147 Fax
jwitherell@maguiregroup.com
www.maguiregroup.com

Attention: The information contained in this E-mail message is privileged and confidential information intended only for the use of the individual(s) named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please contact the sender by reply E-mail and destroy all copies of the original message. Thank you.

6° w/c + Ip

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DOT contract - CDOT c/o MEI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9142

Sampler's Signature: [signature] Date: 5-29-12

Client-Sample-Information-Identification

Matrix Codes:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request:

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	ETPH	Pest + PCBs 8081/8082	Herbicides 8151	Total Recoverable Petroleum Hydrocarbons	Soil Reuse & Metals	TCLP Lead	Soil VOA Vials (1) methanol (2) H2O	GL Soil containers (3) 1oz	GL Soil containers (1) 1oz	40 ml VOA Vial	GL Amber 1000ml	PL As (1) 125ml	PL H2SO4	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X											
91405	GP-10 1-3'			10:15am																		
91406	GP-11 1-3'			10:51am																		
91407	GP-12 1-3'			11:14am																		
91408	GP-13 1-3'			11:54am																		
91409	GP-14 1-3'			12:11pm																		
91410	GP-15 1-3'			12:43pm																		
91411	GP-20 1-3'			12:55																		
91412	GP-21 1-3'			1:20pm																		
91413	GP-22 1-3'			1:44pm																		
91414	TB-15	GW		—																		

Relinquished by: [signature] Accepted by: [signature] Date: 5/30/12 Time: 11:20
[signature] Caleb Gikunji
Caleb Gikunji Caleb Gikunji 5/30/12 1520

Comments, Special Requirements or Regulations:
Additional Analysis per J. Witherell 6/13/12

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
*SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
*SURCHARGE APPLIES

State where samples were collected: CT

Additional Analysis per J. Witherell 6/19/12

PHOENIX
Environmental Laboratories, Inc.

Thursday, May 17, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH CATENARY PROJECT
Sample ID#s: BB80628 - BB80636

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/02/12	6:31
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80628

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-41 10-12

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	05/04/12		EK	6010
Arsenic	1.99	0.74	mg/Kg	05/04/12		EK	6010
Barium	25.1	0.37	mg/Kg	05/04/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	05/04/12		EK	6010
Chromium	13.7	0.37	mg/Kg	05/04/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	05/04/12		RS	SW-7471
Lead	11.3	0.37	mg/Kg	05/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	05/10/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Arsenic	0.029	0.004	mg/L	05/04/12		EK	6010
SPLP Barium	0.167	0.010	mg/L	05/04/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/04/12		EK	6010
SPLP Chromium	0.056	0.010	mg/L	05/04/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/04/12		RS	1312/SW7470
SPLP Lead	0.081	0.010	mg/L	05/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/04/12		EK	6010
Total Metals Digest	Completed			05/03/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/04/12		X/X	SW846-3005
Percent Solid	90		%	05/04/12		JL	E160.3
Soil Extraction for PCB	Completed			05/03/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/03/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/03/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/03/12		SS/F	3545
Mercury Digestion	Completed			05/04/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/04/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/03/12		X	EPA 1312
Field Extraction	Completed			05/02/12		MAG	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 10-12

Phoenix I.D.: BB80628

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/07/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/07/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/07/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/07/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	65		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	11	mg/Kg	05/04/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	75		%	05/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/04/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/04/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	05/04/12		MH	30 - 150 %
% TCMX	90		%	05/04/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/07/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/07/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/07/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/07/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/07/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/07/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/07/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/07/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/07/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/07/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/07/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/07/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/07/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/07/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/07/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 10-12

Phoenix I.D.: BB80628

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/07/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/07/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/07/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/07/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	104		%	05/07/12		KCA	30 - 150 %
% TCMX	90		%	05/07/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/03/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	05/03/12		H/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	05/03/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/03/12		H/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Benzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Bromoform	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Bromomethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Chloroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Chloroform	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Chloromethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/03/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 10-12

Phoenix I.D.: BB80628

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
m&p-Xylene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/03/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/03/12		H/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Naphthalene	300	280	ug/Kg	05/03/12		H/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
o-Xylene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Styrene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/03/12		H/J	SW8260
Toluene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Total Xylenes	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/03/12		H/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	05/03/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/03/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	05/03/12		H/J	70 - 130 %
% Dibromofluoromethane	124		%	05/03/12		H/J	70 - 130 %
% Toluene-d8	102		%	05/03/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrophenol	ND	580	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	05/04/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	05/04/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	05/04/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 10-12

Phoenix I.D.: BB80628

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/04/12		DD	SW 8270
2-Nitroaniline	ND	580	ug/Kg	05/04/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	05/04/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/04/12		DD	SW 8270
3-Nitroaniline	ND	580	ug/Kg	05/04/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/04/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	360	ug/Kg	05/04/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/04/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/04/12		DD	SW 8270
4-Nitroaniline	ND	580	ug/Kg	05/04/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Acenaphthylene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	05/04/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Anthracene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Azobenzene	ND	360	ug/Kg	05/04/12		DD	SW 8270
Benz(a)anthracene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	05/04/12		DD	SW 8270
Benzo(a)pyrene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Benzo(b)fluoranthene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Benzo(ghi)perylene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Benzo(k)fluoranthene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	360	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/04/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	05/04/12		DD	SW 8270
Chrysene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	05/04/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/04/12		DD	SW 8270
Fluoranthene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/04/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	05/04/12		DD	SW 8270
Naphthalene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodimethylamine	ND	360	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 10-12

Phoenix I.D.: BB80628

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	360	ug/Kg	05/04/12		DD	SW 8270
Pentachloronitrobenzene	ND	360	ug/Kg	05/04/12		DD	SW 8270
Pentachlorophenol	ND	360	ug/Kg	05/04/12		DD	SW 8270
Phenanthrene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Phenol	ND	250	ug/Kg	05/04/12		DD	SW 8270
Pyrene	ND	250	ug/Kg	05/04/12		DD	SW 8270
Pyridine	ND	360	ug/Kg	05/04/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	93		%	05/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	78		%	05/04/12		DD	15 - 130 %
% 2-Fluorophenol	87		%	05/04/12		DD	15 - 130 %
% Nitrobenzene-d5	90		%	05/04/12		DD	15 - 130 %
% Phenol-d5	91		%	05/04/12		DD	15 - 130 %
% Terphenyl-d14	112		%	05/04/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/02/12	7:49
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80629

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-42 10-12

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	05/04/12		EK	6010
Arsenic	2.91	0.69	mg/Kg	05/04/12		EK	6010
Barium	50.5	0.34	mg/Kg	05/04/12		EK	6010
Cadmium	< 0.34	0.34	mg/Kg	05/04/12		EK	6010
Chromium	16.4	0.34	mg/Kg	05/04/12		EK	6010
Mercury	< 0.09	0.09	mg/Kg	05/04/12		RS	SW-7471
Lead	11.0	0.34	mg/Kg	05/04/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/04/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.005	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.066	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.018	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/04/12		RS	1312/SW7470
SPLP Lead	0.016	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/03/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/04/12		X/X	SW846-3005
Percent Solid	90		%	05/04/12		JL	E160.3
Soil Extraction for PCB	Completed			05/03/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/03/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/03/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/07/12		SS/F	3545
Mercury Digestion	Completed			05/04/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/04/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/03/12		X	EPA 1312
Field Extraction	Completed			05/02/12		MAG	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-42 10-12

Phoenix I.D.: BB80629

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/07/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/07/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/07/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/07/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/07/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	59		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	11	mg/Kg	05/07/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/07/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	85		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/04/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/04/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	78		%	05/04/12		MH	30 - 150 %
% TCMX	90		%	05/04/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	05/07/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/07/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	05/07/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	05/07/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	05/07/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/07/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/07/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/07/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/07/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/07/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/07/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	05/07/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/07/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/07/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/07/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/07/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	104		%	05/07/12		KCA	30 - 150 %
% TCMX	90		%	05/07/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/04/12		H/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/04/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/04/12		H/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Benzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Bromoform	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Bromomethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Chloroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Chloroform	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Chloromethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/04/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
m&p-Xylene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/04/12		H/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Naphthalene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
o-Xylene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Styrene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/04/12		H/J	SW8260
Toluene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Total Xylenes	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/04/12		H/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	05/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/04/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	05/04/12		H/J	70 - 130 %
% Dibromofluoromethane	97		%	05/04/12		H/J	70 - 130 %
% Toluene-d8	101		%	05/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrophenol	ND	590	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	05/04/12		DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	05/04/12		DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	05/04/12		DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-42 10-12

Phoenix I.D.: BB80629

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	05/04/12		DD	SW 8270
2-Nitroaniline	ND	590	ug/Kg	05/04/12		DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	05/04/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	05/04/12		DD	SW 8270
3-Nitroaniline	ND	590	ug/Kg	05/04/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/04/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	05/04/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	05/04/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	05/04/12		DD	SW 8270
4-Nitroaniline	ND	590	ug/Kg	05/04/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Acenaphthene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Acetophenone	ND	260	ug/Kg	05/04/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Anthracene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Azobenzene	ND	370	ug/Kg	05/04/12		DD	SW 8270
Benz(a)anthracene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	05/04/12		DD	SW 8270
Benzo(a)pyrene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Benzo(b)fluoranthene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Benzo(ghi)perylene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Benzo(k)fluoranthene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/04/12		DD	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	05/04/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	05/04/12		DD	SW 8270
Chrysene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Dibenzofuran	ND	260	ug/Kg	05/04/12		DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	05/04/12		DD	SW 8270
Fluoranthene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Fluorene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	05/04/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Isophorone	ND	260	ug/Kg	05/04/12		DD	SW 8270
Naphthalene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-42 10-12

Phoenix I.D.: BB80629

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	05/04/12		DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	05/04/12		DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	05/04/12		DD	SW 8270
Phenanthrene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Phenol	ND	260	ug/Kg	05/04/12		DD	SW 8270
Pyrene	ND	260	ug/Kg	05/04/12		DD	SW 8270
Pyridine	ND	370	ug/Kg	05/04/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	78		%	05/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	05/04/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	05/04/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/04/12		DD	15 - 130 %
% Phenol-d5	76		%	05/04/12		DD	15 - 130 %
% Terphenyl-d14	99		%	05/04/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/02/12	8:32
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80630

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-43 10-12

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/04/12		EK	6010
Arsenic	3.82	0.71	mg/Kg	05/04/12		EK	6010
Barium	39.4	0.35	mg/Kg	05/04/12		EK	6010
Cadmium	< 0.35	0.35	mg/Kg	05/04/12		EK	6010
Chromium	12.5	0.35	mg/Kg	05/04/12		EK	6010
Mercury	< 0.08	0.08	mg/Kg	05/04/12		RS	SW-7471
Lead	47.1	0.35	mg/Kg	05/04/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/04/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Arsenic	0.025	0.004	mg/L	05/04/12		EK	6010
SPLP Barium	0.215	0.010	mg/L	05/04/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/04/12		EK	6010
SPLP Chromium	0.029	0.010	mg/L	05/04/12		EK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/04/12		RS	1312/SW7470
SPLP Lead	0.637	0.010	mg/L	05/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/04/12		EK	6010
Total Metals Digest	Completed			05/03/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/04/12		X/X	SW846-3005
Percent Solid	94		%	05/04/12		JL	E160.3
Soil Extraction for PCB	Completed			05/03/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/03/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/03/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/03/12		SS/F	3545
Mercury Digestion	Completed			05/04/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/04/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/03/12		X	EPA 1312
Field Extraction	Completed			05/02/12		MAG	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 10-12

Phoenix I.D.: BB80630

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	05/07/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	05/07/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	05/07/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	05/07/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	05/07/12		JRB	SW8151
Dicamba	ND	88	ug/Kg	05/07/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	05/07/12		JRB	SW8151
Dinoseb	ND	88	ug/Kg	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	47		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/04/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	93		%	05/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/04/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/04/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	05/04/12		MH	30 - 150 %
% TCMX	91		%	05/04/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDE	ND	33	ug/Kg	05/07/12		KCA	SW8081
4,4' -DDT	ND	33	ug/Kg	05/07/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/07/12		KCA	SW8081
Aldrin	ND	5.2	ug/Kg	05/07/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Chlordane	ND	52	ug/Kg	05/07/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/07/12		KCA	SW8081
Dieldrin	ND	5.2	ug/Kg	05/07/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/07/12		KCA	SW8081
Endosulfan II	ND	33	ug/Kg	05/07/12		KCA	SW8081
Endosulfan sulfate	ND	33	ug/Kg	05/07/12		KCA	SW8081
Endrin	ND	33	ug/Kg	05/07/12		KCA	SW8081
Endrin aldehyde	ND	33	ug/Kg	05/07/12		KCA	SW8081
Endrin ketone	ND	33	ug/Kg	05/07/12		KCA	SW8081
g-BHC	ND	5.2	ug/Kg	05/07/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/07/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/07/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/07/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/07/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	112		%	05/07/12		KCA	30 - 150 %
% TCMX	95		%	05/07/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3	ug/Kg	05/04/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,1-Dichloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,1-Dichloroethene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,1-Dichloropropene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2-Dichloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,2-Dichloropropane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,3-Dichloropropane	ND	5	ug/Kg	05/04/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
2,2-Dichloropropane	ND	5	ug/Kg	05/04/12		R/J	SW8260
2-Chlorotoluene	ND	5	ug/Kg	05/04/12		R/J	SW8260
2-Hexanone	ND	25	ug/Kg	05/04/12		R/J	SW8260
2-Isopropyltoluene	ND	5	ug/Kg	05/04/12		R/J	SW8260
4-Chlorotoluene	ND	5	ug/Kg	05/04/12		R/J	SW8260
4-Methyl-2-pentanone	ND	25	ug/Kg	05/04/12		R/J	SW8260
Acetone	ND	100	ug/Kg	05/04/12		R/J	SW8260
Acrylonitrile	ND	5	ug/Kg	05/04/12		R/J	SW8260
Benzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Bromobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Bromochloromethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Bromodichloromethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Bromoform	ND	5	ug/Kg	05/04/12		R/J	SW8260
Bromomethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Carbon Disulfide	ND	5	ug/Kg	05/04/12		R/J	SW8260
Carbon tetrachloride	ND	5	ug/Kg	05/04/12		R/J	SW8260
Chlorobenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Chloroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Chloroform	ND	5	ug/Kg	05/04/12		R/J	SW8260
Chloromethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5	ug/Kg	05/04/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Dibromochloromethane	ND	3	ug/Kg	05/04/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Dibromomethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Dichlorodifluoromethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Ethylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Hexachlorobutadiene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Isopropylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
m&p-Xylene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	05/04/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/04/12		R/J	SW8260
Methylene chloride	ND	5	ug/Kg	05/04/12		R/J	SW8260
Naphthalene	ND	5	ug/Kg	05/04/12		R/J	SW8260
n-Butylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
n-Propylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
o-Xylene	ND	5	ug/Kg	05/04/12		R/J	SW8260
p-Isopropyltoluene	ND	5	ug/Kg	05/04/12		R/J	SW8260
sec-Butylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Styrene	ND	5	ug/Kg	05/04/12		R/J	SW8260
tert-Butylbenzene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Tetrachloroethene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/04/12		R/J	SW8260
Toluene	ND	5	ug/Kg	05/04/12		R/J	SW8260
Total Xylenes	ND	5	ug/Kg	05/04/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5	ug/Kg	05/04/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5	ug/Kg	05/04/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/04/12		R/J	SW8260
Trichloroethene	930	5	ug/Kg	05/04/12		R/J	SW8260
Trichlorofluoromethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5	ug/Kg	05/04/12		R/J	SW8260
Vinyl chloride	ND	5	ug/Kg	05/04/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	05/04/12		R/J	70 - 130 %
% Bromofluorobenzene	100		%	05/04/12		R/J	70 - 130 %
% Dibromofluoromethane	88		%	05/04/12		R/J	70 - 130 %
% Toluene-d8	100		%	05/04/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/04/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/04/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/04/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/04/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 10-12

Phoenix I.D.: BB80630

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/04/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/04/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/04/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/04/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/04/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/04/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/04/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/04/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/04/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/04/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/04/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/04/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	05/04/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	05/04/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	05/04/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/04/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/04/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/04/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	05/04/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/04/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/04/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/04/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/04/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/04/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 10-12

Phoenix I.D.: BB80630

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/04/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/04/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/04/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/04/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/04/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/04/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	05/04/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	05/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	05/04/12		DD	15 - 130 %
% 2-Fluorophenol	76		%	05/04/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/04/12		DD	15 - 130 %
% Phenol-d5	79		%	05/04/12		DD	15 - 130 %
% Terphenyl-d14	98		%	05/04/12		DD	15 - 130 %

Comments:

8260 Volatile analysis:
Sample exhibited severe matrix interference. Both Low-level vials were analyzed with very poor internal standard response. The high level analysis did not exhibit this interference. Had any compounds been detected in the high level analysis, they would have been reported at that dilution. The low level analysis was reported, in order to meet the requested reporting criteria, the surrogate recoveries are from the high level analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/02/12	7:00
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80631

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-41 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		EK	6010
Barium	0.077	0.002	mg/L	05/09/12		EK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		EK	6010
Chromium	0.005	0.001	mg/L	05/09/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/07/12		EK	6010/200.7
Barium (Dissolved)	0.059	0.002	mg/L	05/07/12		EK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/07/12		EK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		EK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	05/09/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/03/12		AG	SW846-3005
Total Metals Digestion	Completed			05/03/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/04/12		X/X	SW7470
Mercury Digestion	Completed			05/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed					T	SW3510C
Extraction for Pest (2 Liter)	Completed			05/03/12		T	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.4	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.4	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.4	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	14	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.4	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.8	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.4	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.8	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	125		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	90		%	05/07/12		MH	30 - 150 %
% TCMX	86		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.005	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 GW

Phoenix I.D.: BB80631

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	91		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	91		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,1-Trichloroethane	7.1	1.0	ug/L	05/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Acetone	ND	25	ug/L	05/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrachloroethene	1.3	1.0	ug/L	05/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/05/12		R/T	SW8260
Trichloroethene	76	5.0	ug/L	05/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/05/12		R/T	70 - 130 %
% Bromofluorobenzene	90		%	05/05/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	05/05/12		R/T	70 - 130 %
% Toluene-d8	93		%	05/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/07/12		DD	SW8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 GW

Phoenix I.D.: BB80631

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/07/12		DD	SW8270
Aniline	ND	10	ug/L	05/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
Benzidine	ND	50	ug/L	05/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
Phenol	ND	10	ug/L	05/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/07/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/07/12		DD	15 - 130 %
% Phenol-d5	67		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	118		%	05/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthene	0.18	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.06	0.040	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-41 GW

Phoenix I.D.: BB80631

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.07	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.05	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	0.27	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/07/12		DD	15 - 130 %
% Phenol-d5	67		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	118		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/02/12	9:41
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80632

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-43 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		EK	6010
Barium	0.078	0.002	mg/L	05/09/12		EK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		EK	6010
Chromium	0.006	0.001	mg/L	05/09/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/07/12		EK	6010/200.7
Barium (Dissolved)	0.058	0.002	mg/L	05/07/12		EK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/07/12		EK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		EK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	05/09/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/03/12		AG	SW846-3005
Total Metals Digestion	Completed			05/03/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/04/12		X/X	SW7470
Mercury Digestion	Completed			05/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed					T	SW3510C
Extraction for Pest (2 Liter)	Completed			05/03/12		T	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	77		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	134		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	91		%	05/07/12		MH	30 - 150 %
% TCMX	85		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.003	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 GW

Phoenix I.D.: BB80632

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	90		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Acetone	ND	25	ug/L	05/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/05/12		R/T	70 - 130 %
% Bromofluorobenzene	93		%	05/05/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	05/05/12		R/T	70 - 130 %
% Toluene-d8	93		%	05/05/12		R/T	70 - 130 %

Semivolatiles

1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/07/12		DD	SW8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 GW

Phoenix I.D.: BB80632

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/07/12		DD	SW8270
Aniline	ND	10	ug/L	05/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
Benzidine	ND	50	ug/L	05/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
Phenol	ND	10	ug/L	05/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/07/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	118		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	67		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	59		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	71		%	05/07/12		DD	15 - 130 %
% Phenol-d5	58		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	123		%	05/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.11	0.040	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-43 GW

Phoenix I.D.: BB80632

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.08	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.12	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.09	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.02	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	0.15	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	118		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	67		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	59		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	71		%	05/07/12		DD	15 - 130 %
% Phenol-d5	58		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	123		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/02/12	11:11
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80633

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-46 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		EK	6010/200.7
Arsenic	0.006	0.004	mg/L	05/09/12		EK	6010
Barium	0.120	0.002	mg/L	05/09/12		EK	6010/200.7
Cadmium	0.001	0.001	mg/L	05/09/12		EK	6010
Chromium	0.023	0.001	mg/L	05/09/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/07/12		EK	6010/200.7
Barium (Dissolved)	0.055	0.002	mg/L	05/07/12		EK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/07/12		EK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		EK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead	0.026	0.002	mg/L	05/09/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/03/12		AG	SW846-3005
Total Metals Digestion	Completed			05/03/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/04/12		X/X	SW7470
Mercury Digestion	Completed			05/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed					T	SW3510C
Extraction for Pest (2 Liter)	Completed			05/03/12		T	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	83		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	108		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	0.30	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	92		%	05/07/12		MH	30 - 150 %
% TCMX	108		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	0.004	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.003	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-46 GW

Phoenix I.D.: BB80633

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	85		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	93		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Acetone	ND	25	ug/L	05/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	05/05/12		R/T	70 - 130 %
% Bromofluorobenzene	90		%	05/05/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	05/05/12		R/T	70 - 130 %
% Toluene-d8	93		%	05/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/07/12		DD	SW8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-46 GW

Phoenix I.D.: BB80633

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/07/12		DD	SW8270
Aniline	ND	10	ug/L	05/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
Benzidine	ND	50	ug/L	05/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/07/12		DD	SW8270
Phenol	ND	10	ug/L	05/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/07/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	123		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	78		%	05/07/12		DD	15 - 130 %
% Phenol-d5	63		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	120		%	05/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.09	0.040	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-46 GW

Phoenix I.D.: BB80633

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.07	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.11	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.08	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.01	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	0.1	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	123		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	78		%	05/07/12		DD	15 - 130 %
% Phenol-d5	63		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	120		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/02/12	12:04
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80634

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-49 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		EK	6010/200.7
Arsenic	0.016	0.004	mg/L	05/09/12		EK	6010
Barium	0.164	0.002	mg/L	05/09/12		EK	6010/200.7
Cadmium	0.003	0.001	mg/L	05/09/12		EK	6010
Chromium	0.059	0.001	mg/L	05/09/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/07/12		EK	6010/200.7
Barium (Dissolved)	0.029	0.002	mg/L	05/07/12		EK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/07/12		EK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		EK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead	0.034	0.002	mg/L	05/09/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/03/12		AG	SW846-3005
Total Metals Digestion	Completed			05/03/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/04/12		X/X	SW7470
Mercury Digestion	Completed			05/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed					T	SW3510C
Extraction for Pest (2 Liter)	Completed			05/03/12		T	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	113		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	79		%	05/07/12		MH	30 - 150 %
% TCMX	75		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.007	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-49 GW

Phoenix I.D.: BB80634

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	86		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	94		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,1-Trichloroethane	7.3	1.0	ug/L	05/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Acetone	ND	25	ug/L	05/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrachloroethene	1.5	1.0	ug/L	05/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/05/12		R/T	SW8260
Trichloroethene	76	5.0	ug/L	05/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/05/12		R/T	70 - 130 %
% Bromofluorobenzene	90		%	05/05/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	05/05/12		R/T	70 - 130 %
% Toluene-d8	91		%	05/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-49 GW

Phoenix I.D.: BB80634

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	10	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	121		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	68		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	45		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	05/08/12		DD	15 - 130 %
% Phenol-d5	42		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	144		%	05/08/12		DD	15 - 130 % 3
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.04	0.040	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-49 GW

Phoenix I.D.: BB80634

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)	
Chrysene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)	
Phenanthrene	0.09	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	121		%	05/07/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	68		%	05/07/12		DD	15 - 130 %	
% 2-Fluorophenol	45		%	05/07/12		DD	15 - 130 %	
% Nitrobenzene-d5	72		%	05/07/12		DD	15 - 130 %	
% Phenol-d5	42		%	05/07/12		DD	15 - 130 %	
% Terphenyl-d14	144		%	05/07/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/02/12	13:50
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80635

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-50 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		EK	6010
Barium	0.030	0.002	mg/L	05/09/12		EK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		EK	6010
Chromium	0.009	0.001	mg/L	05/09/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/07/12		EK	6010/200.7
Barium (Dissolved)	0.016	0.002	mg/L	05/07/12		EK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/07/12		EK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/07/12		EK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		EK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/04/12		RS	7470/E245.1
Lead	0.003	0.002	mg/L	05/09/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/03/12		AG	SW846-3005
Total Metals Digestion	Completed			05/03/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/04/12		X/X	SW7470
Mercury Digestion	Completed			05/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed					T	SW3510C
Extraction for Pest (2 Liter)	Completed			05/03/12		T	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	103		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	92		%	05/07/12		MH	30 - 150 %
% TCMX	80		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-50 GW

Phoenix I.D.: BB80635

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	94		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Acetone	ND	25	ug/L	05/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/05/12		R/T	70 - 130 %
% Bromofluorobenzene	91		%	05/05/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	05/05/12		R/T	70 - 130 %
% Toluene-d8	93		%	05/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-50 GW

Phoenix I.D.: BB80635

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	10	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	127		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	64		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/08/12		DD	15 - 130 %
% Phenol-d5	65		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	157		%	05/08/12		DD	15 - 130 % 3
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-50 GW

Phoenix I.D.: BB80635

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)	
Chrysene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)	
Phenanthrene	0.08	0.050	ug/L	05/07/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	127		%	05/07/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	74		%	05/07/12		DD	15 - 130 %	
% 2-Fluorophenol	64		%	05/07/12		DD	15 - 130 %	
% Nitrobenzene-d5	81		%	05/07/12		DD	15 - 130 %	
% Phenol-d5	65		%	05/07/12		DD	15 - 130 %	
% Terphenyl-d14	157		%	05/07/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 17, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		05/02/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/03/12	11:26
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB80628
Phoenix ID: BB80636

Project ID: METRO NORTH CATENARY PROJECT

Client ID: TB-10

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/04/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/04/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/04/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/04/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/04/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/04/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/04/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/04/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/04/12		R/T	SW8260
Acetone	ND	25	ug/L	05/04/12		R/T	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: TB-10

Phoenix I.D.: BB80636

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	05/04/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/04/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/04/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/04/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/04/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/04/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/04/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/04/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/04/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/04/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/04/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/04/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/04/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/04/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/04/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/04/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/04/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/04/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/04/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/04/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/04/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/04/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/04/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/04/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/04/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/04/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/04/12		R/T	70 - 130 %
% Bromofluorobenzene	93		%	05/04/12		R/T	70 - 130 %
% Dibromofluoromethane	102		%	05/04/12		R/T	70 - 130 %
% Toluene-d8	93		%	05/04/12		R/T	70 - 130 %

Project ID: METRO NORTH CATENARY PROJECT

Phoenix I.D.: BB80636

Client ID: TB-10

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 17, 2012

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199757, QC Sample No: BB80494 (BB80631, BB80632, BB80633, BB80634, BB80635)													
ICP Metals - Dissolved													
Arsenic	BDL	0.0029	<0.004	NC	99.8	93.0	7.1	99.9	102	2.1	75 - 125	20	
Barium	BDL	0.128	0.127	0.80	100	93.2	7.0	95.0	97.8	2.9	75 - 125	20	
Cadmium	BDL	0.0003	<0.001	NC	105	97.1	7.8	100	103	3.0	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	101	94.4	6.8	95.7	98.3	2.7	75 - 125	20	
Lead	BDL	<0.002	<0.002	NC	101	93.7	7.5	97.2	100	2.8	75 - 125	20	
Selenium	BDL	<0.011	<0.011	NC	96.4	90.5	6.3	98.1	98.7	0.6	75 - 125	20	
Silver	BDL	<0.001	<0.001	NC	96.3	89.6	7.2	40.6	45.5	11.4	75 - 125	20	m
QA/QC Batch 199835, QC Sample No: BB80628 (BB80628, BB80629, BB80630)													
ICP Metals - Soil													
Arsenic	BDL	1.99	4.01	NC	85.6	83.3	2.7	92.3	93.9	1.7	75 - 125	30	
Barium	BDL	25.1	27.1	7.70	91.5	89.7	2.0	96.9	98.9	2.0	75 - 125	30	
Cadmium	BDL	<0.37	<0.33	NC	80.5	79.6	1.1	96.0	97.2	1.2	75 - 125	30	
Chromium	BDL	13.7	15.0	9.10	88.5	89.0	0.6	96.6	99.2	2.7	75 - 125	30	
Lead	BDL	11.3	8.77	25.2	89.8	87.4	2.7	94.4	96.2	1.9	75 - 125	30	
Selenium	BDL	2.3	<1.3	NC	84.0	81.6	2.9	79.2	80.5	1.6	75 - 125	30	
Silver	BDL	<0.37	<0.33	NC	88.5	85.6	3.3	94.5	96.6	2.2	75 - 125	30	
QA/QC Batch 199961, QC Sample No: BB80629 (BB80628, BB80629, BB80630)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.005	<0.004	NC	99.2	99.4	0.2	98.5	99.3	0.8	75 - 125	20	
Barium	BDL	0.066	0.074	11.4	98.2	98.1	0.1	97.6	97.6	0.0	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	100	101	1.0	99.1	101	1.9	75 - 125	20	
Chromium	BDL	0.018	0.017	NC	99.4	99.6	0.2	99.4	101	1.6	75 - 125	20	
Lead	BDL	0.016	0.018	NC	99.4	100	0.6	100	101	1.0	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	100	100	0.0	98.4	100	1.6	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	92.4	92.7	0.3	93.6	94.3	0.7	75 - 125	20	
QA/QC Batch 199959, QC Sample No: BB80631 (BB80628, BB80629, BB80630, BB80631, BB80632, BB80633, BB80634, BB80635)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	103	99.8	3.2	101	102	1.0	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 199868, QC Sample No: BB80634 (BB80631, BB80632, BB80633, BB80634, BB80635)													
ICP Metals - Aqueous													
Arsenic	BDL	0.016	0.016	NC	100	99.9	0.1	98.5	96.7	1.8	75 - 125	20	
Barium	BDL	0.164	0.164	0	107	104	2.8	106	105	0.9	75 - 125	20	
Cadmium	BDL	0.003	0.003	NC	102	102	0.0	100	98.4	1.6	75 - 125	20	
Chromium	BDL	0.059	0.060	1.70	102	102	0.0	101	99.9	1.1	75 - 125	20	
Lead	BDL	0.034	0.034	0	101	101	0.0	99.0	98.4	0.6	75 - 125	20	
Selenium	BDL	0.011	0.012	NC	94.8	94.1	0.7	92.1	90.5	1.8	75 - 125	20	
Silver	BDL	<0.001	<0.001	NC	101	98.0	3.0	99.1	97.6	1.5	75 - 125	20	

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199897, QC Sample No: BB80808 (BB80628, BB80629, BB80630)												
Mercury - Soil	BDL	0.21	0.17	NC	90.7	88.5	2.5	108	110	1.8	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

m = This parameter is outside laboratory ms/msd specified recovery limits.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 17, 2012

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199256, QC Sample No: BB77175 (BB80631, BB80632, BB80633)									
Chlorinated Herbicides - Ground Water									
2,4,5-T	ND	91	92	1.1				40 - 140	20
2,4,5-TP (Silvex)	ND	89	91	2.2				40 - 140	20
2,4-D	ND	104	102	1.9				40 - 140	20
2,4-DB	ND	88	90	2.2				40 - 140	20
Dalapon	ND	89	90	1.1				40 - 140	20
Dicamba	ND	85	86	1.2				40 - 140	20
Dichloroprop	ND	82	85	3.6				40 - 140	20
Dinoseb	ND	63	61	3.2				40 - 140	20
% DCAA (Surrogate Rec)	68	72	74	2.7				30 - 150	20
QA/QC Batch 199869, QC Sample No: BB79693 (BB80631, BB80632, BB80633, BB80634, BB80635)									
Polychlorinated Biphenyls - Ground Water									
PCB-1016	ND	79	78	1.3	84	81	3.6	40 - 140	20
PCB-1221	ND							40 - 140	20
PCB-1232	ND							40 - 140	20
PCB-1242	ND							40 - 140	20
PCB-1248	ND							40 - 140	20
PCB-1254	ND							40 - 140	20
PCB-1260	ND	83	82	1.2	93	89	4.4	40 - 140	20
PCB-1262	ND							40 - 140	20
PCB-1268	ND							40 - 140	20
% DCBP (Surrogate Rec)	92	91	97	6.4	90	85	5.7	30 - 150	20
% TCMX (Surrogate Rec)	72	73	72	1.4	77	72	6.7	30 - 150	20
QA/QC Batch 199744, QC Sample No: BB79766 (BB80628, BB80629, BB80630)									
Pesticides - Soil									
4,4' -DDD	ND	80	84	4.9	80	83	3.7	40 - 140	30
4,4' -DDE	ND	80	83	3.7	81	81	0.0	40 - 140	30
4,4' -DDT	ND	77	85	9.9	79	79	0.0	40 - 140	30
a-BHC	ND	83	87	4.7	84	85	1.2	40 - 140	30
a-Chlordane	ND	81	85	4.8	82	82	0.0	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	80	84	4.9	81	82	1.2	40 - 140	30
b-BHC	ND	82	85	3.6	81	81	0.0	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	82	86	4.8	84	85	1.2	40 - 140	30
Dieldrin	ND	81	86	6.0	82	83	1.2	40 - 140	30
Endosulfan I	ND	79	83	4.9	82	81	1.2	40 - 140	30
Endosulfan II	ND	69	76	9.7	79	78	1.3	40 - 140	30
Endosulfan sulfate	ND	69	77	11.0	76	78	2.6	40 - 140	30
Endrin	ND	74	79	6.5	79	81	2.5	40 - 140	30
Endrin aldehyde	ND	65	75	14.3	82	86	4.8	40 - 140	30

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Endrin ketone	ND	82	91	10.4	85	87	2.3	40 - 140	30	
g-BHC	ND	83	87	4.7	84	84	0.0	40 - 140	30	
g-Chlordane	ND	81	85	4.8	82	83	1.2	40 - 140	30	
Heptachlor	ND	81	85	4.8	82	84	2.4	40 - 140	30	
Heptachlor epoxide	ND	81	84	3.6	82	82	0.0	40 - 140	30	
Methoxychlor	ND	75	82	8.9	87	96	9.8	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	93	86	96	11.0	86	93	7.8	30 - 150	30	
% TCMX	93	90	93	3.3	89	90	1.1	30 - 150	30	
QA/QC Batch 199724, QC Sample No: BB79766 (BB80628, BB80629, BB80630)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	106	98	7.8	90	94	4.3	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	117	107	8.9	96	94	2.1	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	58	105	96	9.0	74	73	1.4	30 - 150	30	
% TCMX (Surrogate Rec)	50	92	83	10.3	80	79	1.3	30 - 150	30	
QA/QC Batch 199719, QC Sample No: BB79766 (BB80628, BB80629, BB80630)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	43	43	0.0	44	42	4.7	30 - 130	30	
1,2,4-Trichlorobenzene	ND	66	67	1.5	68	67	1.5	30 - 130	30	
1,2-Dichlorobenzene	ND	65	66	1.5	66	64	3.1	30 - 130	30	
1,3-Dichlorobenzene	ND	63	64	1.6	65	64	1.6	30 - 130	30	
1,4-Dichlorobenzene	ND	65	65	0.0	66	65	1.5	30 - 130	30	
2,4,5-Trichlorophenol	ND	83	84	1.2	85	82	3.6	30 - 130	30	
2,4,6-Trichlorophenol	ND	78	79	1.3	81	77	5.1	30 - 130	30	
2,4-Dichlorophenol	ND	75	77	2.6	77	73	5.3	30 - 130	30	
2,4-Dimethylphenol	ND	53	53	0.0	55	52	5.6	30 - 130	30	
2,4-Dinitrophenol	ND	<5	8.2	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	78	79	1.3	77	73	5.3	30 - 130	30	
2,6-Dinitrotoluene	ND	79	80	1.3	80	76	5.1	30 - 130	30	
2-Chloronaphthalene	ND	76	77	1.3	76	76	0.0	30 - 130	30	
2-Chlorophenol	ND	70	71	1.4	71	68	4.3	30 - 130	30	
2-Methylnaphthalene	ND	71	73	2.8	74	71	4.1	30 - 130	30	
2-Methylphenol (o-cresol)	ND	68	69	1.5	70	66	5.9	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	73	73	0.0	74	66	11.4	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	72	73	1.4	74	68	8.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	61	61	0.0	63	65	3.1	30 - 130	30	
3-Nitroaniline	ND	83	85	2.4	83	78	6.2	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	71	75	5.5	60	50	18.2	30 - 130	30	
4-Bromophenyl phenyl ether	ND	80	80	0.0	80	78	2.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	80	82	2.5	81	78	3.8	30 - 130	30	
4-Chloroaniline	ND	149	146	2.0	133	119	11.1	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	79	79	0.0	78	77	1.3	30 - 130	30	
4-Nitroaniline	ND	83	85	2.4	83	78	6.2	30 - 130	30	
4-Nitrophenol	ND	92	69	28.6	66	61	7.9	30 - 130	30	

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acenaphthene	ND	75	77	2.6	76	74	2.7	30 - 130	30	
Acenaphthylene	ND	73	74	1.4	73	71	2.8	30 - 130	30	
Acetophenone	ND	34	35	2.9	35	33	5.9	30 - 130	30	
Aniline	ND	50	50	0.0	48	32	40.0	30 - 130	30	r
Anthracene	ND	79	79	0.0	79	79	0.0	30 - 130	30	
Azobenzene	ND	36	36	0.0	36	36	0.0	30 - 130	30	
Benz(a)anthracene	ND	77	77	0.0	76	76	0.0	30 - 130	30	
Benzidine	ND	117	113	3.5	94	91	3.2	30 - 130	30	
Benzo(a)pyrene	ND	78	77	1.3	76	75	1.3	30 - 130	30	
Benzo(b)fluoranthene	ND	78	80	2.5	80	79	1.3	30 - 130	30	
Benzo(ghi)perylene	ND	84	80	4.9	80	90	11.8	30 - 130	30	
Benzo(k)fluoranthene	ND	85	80	6.1	83	79	4.9	30 - 130	30	
Benzyl butyl phthalate	ND	78	79	1.3	80	76	5.1	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	71	73	2.8	73	71	2.8	30 - 130	30	
Bis(2-chloroethyl)ether	ND	63	63	0.0	64	71	10.4	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	66	66	0.0	67	64	4.6	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	78	79	1.3	79	78	1.3	30 - 130	30	
Carbazole	ND	119	119	0.0	118	113	4.3	30 - 130	30	
Chrysene	ND	75	77	2.6	77	74	4.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	84	82	2.4	81	88	8.3	30 - 130	30	
Dibenzofuran	ND	75	76	1.3	75	74	1.3	30 - 130	30	
Diethyl phthalate	ND	78	78	0.0	78	79	1.3	30 - 130	30	
Dimethylphthalate	ND	78	78	0.0	78	77	1.3	30 - 130	30	
Di-n-butylphthalate	ND	76	76	0.0	76	79	3.9	30 - 130	30	
Di-n-octylphthalate	ND	81	80	1.2	81	82	1.2	30 - 130	30	
Fluoranthene	ND	79	78	1.3	78	80	2.5	30 - 130	30	
Fluorene	ND	78	78	0.0	78	76	2.6	30 - 130	30	
Hexachlorobenzene	ND	75	76	1.3	76	76	0.0	30 - 130	30	
Hexachlorobutadiene	ND	69	69	0.0	70	69	1.4	30 - 130	30	
Hexachlorocyclopentadiene	ND	74	78	5.3	80	52	42.4	30 - 130	30	r
Hexachloroethane	ND	63	64	1.6	65	63	3.1	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	84	81	3.6	80	89	10.7	30 - 130	30	
Isophorone	ND	72	73	1.4	73	72	1.4	30 - 130	30	
Naphthalene	ND	68	69	1.5	70	69	1.4	30 - 130	30	
Nitrobenzene	ND	68	69	1.5	70	65	7.4	30 - 130	30	
N-Nitrosodimethylamine	ND	61	60	1.7	61	60	1.7	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	70	71	1.4	70	63	10.5	30 - 130	30	
N-Nitrosodiphenylamine	ND	85	85	0.0	83	79	4.9	30 - 130	30	
Pentachloronitrobenzene	ND	82	82	0.0	81	84	3.6	30 - 130	30	
Pentachlorophenol	ND	81	90	10.5	104	89	15.5	30 - 130	30	
Phenanthrene	ND	79	79	0.0	79	79	0.0	30 - 130	30	
Phenol	ND	72	74	2.7	72	72	0.0	30 - 130	30	
Pyrene	ND	80	80	0.0	79	82	3.7	30 - 130	30	
Pyridine	ND	27	27	0.0	27	27	0.0	30 - 130	30	l,m
% 2,4,6-Tribromophenol	92	81	83	2.4	82	81	1.2	15 - 130	30	
% 2-Fluorobiphenyl	78	70	72	2.8	72	70	2.8	30 - 130	30	
% 2-Fluorophenol	81	71	72	1.4	73	69	5.6	15 - 130	30	
% Nitrobenzene-d5	80	67	68	1.5	68	64	6.1	30 - 130	30	
% Phenol-d5	77	69	70	1.4	70	66	5.9	15 - 130	30	
% Terphenyl-d14	106	95	94	1.1	93	96	3.2	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Data

SDG I.D.: GBB80628

QA/QC Batch 199755, QC Sample No: BB79767 (BB80631, BB80632, BB80633, BB80634, BB80635)

Pesticides - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDD	ND	87	83	4.7				40 - 140	20
4,4' -DDE	ND	88	84	4.7				40 - 140	20
4,4' -DDT	ND	91	87	4.5				40 - 140	20
a-BHC	ND	84	82	2.4				40 - 140	20
a-Chlordane	ND	70	67	4.4				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	79	76	3.9				40 - 140	20
b-BHC	ND	83	80	3.7				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	96	93	3.2				40 - 140	20
Dieldrin	ND	85	83	2.4				40 - 140	20
Endosulfan I	ND	81	80	1.2				40 - 140	20
Endosulfan II	ND	89	86	3.4				40 - 140	20
Endosulfan sulfate	ND	79	76	3.9				40 - 140	20
Endrin	ND	90	88	2.2				40 - 140	20
Endrin aldehyde	ND	89	89	0.0				40 - 140	20
Endrin ketone	ND	92	89	3.3				40 - 140	20
g-BHC	ND	85	83	2.4				40 - 140	20
g-Chlordane	ND	84	81	3.6				40 - 140	20
Heptachlor	ND	94	88	6.6				40 - 140	20
Heptachlor epoxide	ND	82	79	3.7				40 - 140	20
Methoxychlor	ND	102	99	3.0				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	89	100	100	0.0				30 - 150	20
% TCMX	76	85	85	0.0				30 - 150	20

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Batch 199838, QC Sample No: BB80503 (BB80631, BB80632, BB80633, BB80634, BB80635)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	34	35	2.9				30 - 130	20
1,2,4-Trichlorobenzene	ND	58	56	3.5				30 - 130	20
1,2-Dichlorobenzene	ND	67	65	3.0				30 - 130	20
1,3-Dichlorobenzene	ND	62	61	1.6				30 - 130	20
1,4-Dichlorobenzene	ND	67	62	7.8				30 - 130	20
2,4,5-Trichlorophenol	ND	77	78	1.3				30 - 130	20
2,4,6-Trichlorophenol	ND	76	78	2.6				30 - 130	20
2,4-Dichlorophenol	ND	70	67	4.4				30 - 130	20
2,4-Dimethylphenol	ND	46	45	2.2				30 - 130	20
2,4-Dinitrophenol	ND	19	19	0.0				30 - 130	20
2,4-Dinitrotoluene	ND	76	78	2.6				30 - 130	20
2,6-Dinitrotoluene	ND	78	78	0.0				30 - 130	20
2-Chloronaphthalene	ND	67	70	4.4				30 - 130	20
2-Chlorophenol	ND	73	72	1.4				30 - 130	20
2-Methylnaphthalene	ND	63	61	3.2				30 - 130	20
2-Methylphenol (o-cresol)	ND	75	74	1.3				30 - 130	20
2-Nitroaniline	ND	130	133	2.3				30 - 130	20
2-Nitrophenol	ND	61	62	1.6				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	69	69	0.0				30 - 130	20
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
3-Nitroaniline	ND	133	131	1.5				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	67	68	1.5				30 - 130	20	
4-Bromophenyl phenyl ether	ND	72	76	5.4				30 - 130	20	
4-Chloro-3-methylphenol	ND	76	78	2.6				30 - 130	20	
4-Chloroaniline	ND	89	91	2.2				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	75	75	0.0				30 - 130	20	
4-Nitroaniline	ND	85	84	1.2				30 - 130	20	
4-Nitrophenol	ND	86	89	3.4				30 - 130	20	
Acenaphthene	ND	73	73	0.0				30 - 130	20	
Acenaphthylene	ND	72	74	2.7				30 - 130	20	
Acetophenone	ND	35	35	0.0				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	80	81	1.2				30 - 130	20	
Azobenzene	ND	39	39	0.0				30 - 130	20	
Benz(a)anthracene	ND	82	81	1.2				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	75	76	1.3				30 - 130	20	
Benzo(b)fluoranthene	ND	80	82	2.5				30 - 130	20	
Benzo(ghi)perylene	ND	77	79	2.6				30 - 130	20	
Benzo(k)fluoranthene	ND	81	82	1.2				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	87	88	1.1				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	70	71	1.4				30 - 130	20	
Bis(2-chloroethyl)ether	ND	72	68	5.7				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	80	75	6.5				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	95	96	1.0				30 - 130	20	
Carbazole	ND	100	100	0.0				30 - 130	20	
Chrysene	ND	78	81	3.8				30 - 130	20	
Dibenz(a,h)anthracene	ND	77	79	2.6				30 - 130	20	
Dibenzofuran	ND	73	73	0.0				30 - 130	20	
Diethyl phthalate	ND	81	83	2.4				30 - 130	20	
Dimethylphthalate	ND	79	79	0.0				30 - 130	20	
Di-n-butylphthalate	ND	87	87	0.0				30 - 130	20	
Di-n-octylphthalate	ND	96	97	1.0				30 - 130	20	
Fluoranthene	ND	76	79	3.9				30 - 130	20	
Fluorene	ND	75	76	1.3				30 - 130	20	
Hexachlorobenzene	ND	74	77	4.0				30 - 130	20	
Hexachlorobutadiene	ND	55	54	1.8				30 - 130	20	
Hexachlorocyclopentadiene	ND	23	24	4.3				30 - 130	20	I
Hexachloroethane	ND	62	62	0.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	76	77	1.3				30 - 130	20	
Isophorone	ND	70	68	2.9				30 - 130	20	
Naphthalene	ND	64	63	1.6				30 - 130	20	
Nitrobenzene	ND	73	71	2.8				30 - 130	20	
N-Nitrosodimethylamine	ND	49	48	2.1				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	67	67	0.0				30 - 130	20	
N-Nitrosodiphenylamine	ND	84	84	0.0				30 - 130	20	
Pentachloronitrobenzene	ND	79	81	2.5				30 - 130	20	
Pentachlorophenol	ND	47	53	12.0				30 - 130	20	
Phenanthrene	ND	80	80	0.0				30 - 130	20	
Phenol	ND	68	67	1.5				30 - 130	20	
Pyrene	ND	79	79	0.0				30 - 130	20	
Pyridine	ND	14	14	0.0				30 - 130	20	I

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% 2,4,6-Tribromophenol	113	81	78	3.8				15 - 130	20	
% 2-Fluorobiphenyl	73	64	65	1.6				30 - 130	20	
% 2-Fluorophenol	69	62	62	0.0				15 - 130	20	
% Nitrobenzene-d5	83	70	69	1.4				30 - 130	20	
% Phenol-d5	71	68	66	3.0				15 - 130	20	
% Terphenyl-d14	119	88	89	1.1				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 199753, QC Sample No: BB80523 (BB80628, BB80629, BB80630)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	82	73	11.6	81	85	4.8	50 - 150	30	
% n-Pentacosane	72	93	80	15.0	78	96	20.7	50 - 150	30	

QA/QC Batch 199999, QC Sample No: BB80628 (BB80628, BB80629, BB80630)

Chlorinated Herbicides - Soil

2,4,5-T	ND	69	73	5.6	86	85	1.2	40 - 140	30	
2,4,5-TP (Silvex)	ND	68	72	5.7	70	70	0.0	40 - 140	30	
2,4-D	ND	68	72	5.7	75	75	0.0	40 - 140	30	
2,4-DB	ND	76	77	1.3	71	75	5.5	40 - 140	30	
Dalapon	ND	60	64	6.5	56	59	5.2	40 - 140	30	
Dicamba	ND	66	71	7.3	72	72	0.0	40 - 140	30	
Dichloroprop	ND	58	62	6.7	59	59	0.0	40 - 140	30	
Dinoseb	ND	66	62	6.3	68	65	4.5	40 - 140	30	
% DCAA (Surrogate Rec)	61	54	55	1.8	56	56	0.0	30 - 150	30	

QA/QC Batch 200100, QC Sample No: BB80629 (BB80629)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	94	91	3.2	99	93	6.3	70 - 130	30	
1,1,1-Trichloroethane	ND	86	85	1.2	95	111	15.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	100	89	11.6	101	99	2.0	70 - 130	30	
1,1,2-Trichloroethane	ND	96	90	6.5	98	94	4.2	70 - 130	30	
1,1-Dichloroethane	ND	109	82	28.3	94	112	17.5	70 - 130	30	
1,1-Dichloroethene	ND	94	91	3.2	112	105	6.5	70 - 130	30	
1,1-Dichloropropene	ND	82	84	2.4	97	92	5.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	93	82	12.6	81	82	1.2	70 - 130	30	
1,2,3-Trichloropropane	ND	101	90	11.5	93	94	1.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	83	78	6.2	76	75	1.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	88	87	1.1	93	89	4.4	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	114	101	12.1	97	103	6.0	70 - 130	30	
1,2-Dichlorobenzene	ND	86	83	3.6	91	85	6.8	70 - 130	30	
1,2-Dichloroethane	ND	93	89	4.4	99	95	4.1	70 - 130	30	
1,2-Dichloropropane	ND	94	93	1.1	103	96	7.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	91	89	2.2	95	91	4.3	70 - 130	30	
1,3-Dichlorobenzene	ND	83	83	0.0	89	82	8.2	70 - 130	30	
1,3-Dichloropropane	ND	94	92	2.2	100	93	7.3	70 - 130	30	
1,4-Dichlorobenzene	ND	80	80	0.0	88	80	9.5	70 - 130	30	
2,2-Dichloropropane	ND	108	80	29.8	90	112	21.8	70 - 130	30	
2-Chlorotoluene	ND	90	86	4.5	94	88	6.6	70 - 130	30	
2-Hexanone	ND	94	96	2.1	59	62	5.0	70 - 130	30	m
2-Isopropyltoluene	ND	101	99	2.0	99	93	6.3	70 - 130	30	
4-Chlorotoluene	ND	84	82	2.4	93	87	6.7	70 - 130	30	

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
4-Methyl-2-pentanone	ND	119	104	13.5	91	98	7.4	70 - 130	30	
Acetone	ND	107	110	2.8	45	51	12.5	70 - 130	30	m
Acrylonitrile	ND	135	93	36.8	91	120	27.5	70 - 130	30	l,r
Benzene	ND	95	91	4.3	102	98	4.0	70 - 130	30	
Bromobenzene	ND	89	88	1.1	93	85	9.0	70 - 130	30	
Bromochloromethane	ND	104	80	26.1	85	103	19.1	70 - 130	30	
Bromodichloromethane	ND	95	95	0.0	104	96	8.0	70 - 130	30	
Bromoform	ND	98	95	3.1	101	94	7.2	70 - 130	30	
Bromomethane	ND	89	98	9.6	113	99	13.2	70 - 130	30	
Carbon Disulfide	ND	108	103	4.7	111	107	3.7	70 - 130	30	
Carbon tetrachloride	ND	99	81	20.0	105	116	10.0	70 - 130	30	
Chlorobenzene	ND	87	86	1.2	96	89	7.6	70 - 130	30	
Chloroethane	ND	96	98	2.1	117	108	8.0	70 - 130	30	
Chloroform	ND	106	84	23.2	93	109	15.8	70 - 130	30	
Chloromethane	ND	99	85	15.2	95	100	5.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	106	81	26.7	90	108	18.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	95	89	6.5	99	93	6.3	70 - 130	30	
Dibromochloromethane	ND	92	90	2.2	98	92	6.3	70 - 130	30	
Dibromoethane	ND	95	89	6.5	96	92	4.3	70 - 130	30	
Dibromomethane	ND	96	89	7.6	98	94	4.2	70 - 130	30	
Dichlorodifluoromethane	ND	82	86	4.8	95	89	6.5	70 - 130	30	
Ethylbenzene	ND	89	91	2.2	100	92	8.3	70 - 130	30	
Hexachlorobutadiene	ND	83	80	3.7	86	87	1.2	70 - 130	30	
Isopropylbenzene	ND	90	91	1.1	101	95	6.1	70 - 130	30	
m&p-Xylene	ND	87	88	1.1	99	91	8.4	70 - 130	30	
Methyl ethyl ketone	ND	88	86	2.3	45	56	21.8	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	116	88	27.5	104	100	3.9	70 - 130	30	
Methylene chloride	ND	81	78	3.8	90	85	5.7	70 - 130	30	
Naphthalene	ND	106	89	17.4	89	95	6.5	70 - 130	30	
n-Butylbenzene	ND	86	88	2.3	93	89	4.4	70 - 130	30	
n-Propylbenzene	ND	82	83	1.2	98	89	9.6	70 - 130	30	
o-Xylene	ND	96	97	1.0	100	92	8.3	70 - 130	30	
p-Isopropyltoluene	ND	90	93	3.3	97	92	5.3	70 - 130	30	
sec-Butylbenzene	ND	86	89	3.4	101	95	6.1	70 - 130	30	
Styrene	ND	96	97	1.0	99	90	9.5	70 - 130	30	
tert-Butylbenzene	ND	89	90	1.1	101	95	6.1	70 - 130	30	
Tetrachloroethene	ND	84	83	1.2	98	94	4.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	120	94	24.3	89	114	24.6	70 - 130	30	
Toluene	ND	93	92	1.1	102	96	6.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	89	8.6	109	103	5.7	70 - 130	30	
trans-1,3-Dichloropropene	ND	94	91	3.2	97	92	5.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	114	105	8.2	93	91	2.2	70 - 130	30	
Trichloroethene	ND	91	90	1.1	97	94	3.1	70 - 130	30	
Trichlorofluoromethane	ND	115	112	2.6	114	109	4.5	70 - 130	30	
Trichlorotrifluoroethane	ND	104	105	1.0	111	108	2.7	70 - 130	30	
Vinyl chloride	ND	97	95	2.1	108	103	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	101	99	2.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	97	97	103	6.0	103	99	4.0	70 - 130	30	
% Dibromofluoromethane	116	94	84	11.2	84	120	35.3	70 - 130	30	r
% Toluene-d8	100	102	100	2.0	103	103	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199956, QC Sample No: BB80634 (BB80634, BB80635)										
Chlorinated Herbicides - Ground Water										
2,4,5-T	ND	76	88	14.6				40 - 140	20	
2,4,5-TP (Silvex)	ND	73	84	14.0				40 - 140	20	
2,4-D	ND	75	86	13.7				40 - 140	20	
2,4-DB	ND	96	88	8.7				40 - 140	20	
Dalapon	ND	61	72	16.5				40 - 140	20	
Dicamba	ND	70	79	12.1				40 - 140	20	
Dichloroprop	ND	64	72	11.8				40 - 140	20	
Dinoseb	ND	78	85	8.6				40 - 140	20	
% DCAA (Surrogate Rec)	75	59	65	9.7				30 - 150	20	
Comment:										
A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 199989, QC Sample No: BB80763 (BB80631, BB80632, BB80633, BB80634, BB80635)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	107	107	0.0	124	123	0.8	50 - 150	20	
% n-Pentacosane	100	126	124	1.6	145	145	0.0	50 - 150	20	
QA/QC Batch 200105, QC Sample No: BB80763 (BB80631, BB80632, BB80633, BB80634, BB80635, BB80636)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	121	99	20.0	115	115	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	110	99	10.5	116	122	5.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	100	95	5.1	90	98	8.5	70 - 130	30	
1,1,2-Trichloroethane	ND	118	100	16.5	108	111	2.7	70 - 130	30	
1,1-Dichloroethane	ND	102	93	9.2	100	109	8.6	70 - 130	30	
1,1-Dichloroethene	ND	88	80	9.5	99	106	6.8	70 - 130	30	
1,1-Dichloropropene	ND	99	87	12.9	108	112	3.6	70 - 130	30	
1,2,3-Trichlorobenzene	ND	121	109	10.4	97	115	17.0	70 - 130	30	
1,2,3-Trichloropropane	ND	105	98	6.9	92	98	6.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	113	103	9.3	98	113	14.2	70 - 130	30	
1,2,4-Trimethylbenzene	ND	103	93	10.2	102	110	7.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	95	10.0	83	95	13.5	70 - 130	30	
1,2-Dichlorobenzene	ND	105	92	13.2	100	106	5.8	70 - 130	30	
1,2-Dichloroethane	ND	115	98	16.0	103	108	4.7	70 - 130	30	
1,2-Dichloropropane	ND	103	92	11.3	99	104	4.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	104	94	10.1	102	109	6.6	70 - 130	30	
1,3-Dichlorobenzene	ND	106	92	14.1	102	106	3.8	70 - 130	30	
1,3-Dichloropropane	ND	127	110	14.3	118	121	2.5	70 - 130	30	
1,4-Dichlorobenzene	ND	101	88	13.8	98	102	4.0	70 - 130	30	
2,2-Dichloropropane	ND	128	137	6.8	>150	143	NC	70 - 130	30	l,m
2-Chlorotoluene	ND	102	91	11.4	102	107	4.8	70 - 130	30	
2-Hexanone	ND	98	91	7.4	62	74	17.6	70 - 130	30	m
2-Isopropyltoluene	ND	115	103	11.0	104	111	6.5	70 - 130	30	
4-Chlorotoluene	ND	100	89	11.6	101	108	6.7	70 - 130	30	
4-Methyl-2-pentanone	ND	112	104	7.4	88	93	5.5	70 - 130	30	
Acetone	ND	90	88	2.2	79	86	8.5	70 - 130	30	
Acrylonitrile	ND	115	113	1.8	73	79	7.9	70 - 130	30	
Benzene	ND	101	88	13.8	101	107	5.8	70 - 130	30	
Bromobenzene	ND	105	93	12.1	98	103	5.0	70 - 130	30	
Bromochloromethane	ND	120	105	13.3	107	112	4.6	70 - 130	30	
Bromodichloromethane	ND	116	98	16.8	113	115	1.8	70 - 130	30	
Bromoform	ND	109	91	18.0	93	91	2.2	70 - 130	30	

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromomethane	ND	104	90	14.4	108	111	2.7	70 - 130	30	
Carbon Disulfide	ND	101	94	7.2	99	106	6.8	70 - 130	30	
Carbon tetrachloride	ND	98	85	14.2	109	110	0.9	70 - 130	30	
Chlorobenzene	ND	104	90	14.4	104	106	1.9	70 - 130	30	
Chloroethane	ND	97	91	6.4	102	112	9.3	70 - 130	30	
Chloroform	ND	108	97	10.7	95	103	8.1	70 - 130	30	
Chloromethane	ND	84	81	3.6	83	88	5.8	70 - 130	30	
cis-1,2-Dichloroethene	ND	112	97	14.4	104	114	9.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	116	102	12.8	110	115	4.4	70 - 130	30	
Dibromochloromethane	ND	128	105	19.7	116	115	0.9	70 - 130	30	
Dibromoethane	ND	107	95	11.9	102	105	2.9	70 - 130	30	
Dibromomethane	ND	119	100	17.4	105	109	3.7	70 - 130	30	
Dichlorodifluoromethane	ND	96	93	3.2	112	112	0.0	70 - 130	30	
Ethylbenzene	ND	107	91	16.2	107	108	0.9	70 - 130	30	
Hexachlorobutadiene	ND	95	84	12.3	111	111	0.0	70 - 130	30	
Isopropylbenzene	ND	99	90	9.5	104	110	5.6	70 - 130	30	
m&p-Xylene	ND	104	89	15.5	105	106	0.9	70 - 130	30	
Methyl ethyl ketone	ND	123	123	0.0	75	94	22.5	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	>150	149	NC	129	124	4.0	70 - 130	30	I
Methylene chloride	ND	100	90	10.5	96	102	6.1	70 - 130	30	
Naphthalene	ND	138	144	4.3	71	126	55.8	70 - 130	30	I,r
n-Butylbenzene	ND	104	98	5.9	105	116	10.0	70 - 130	30	
n-Propylbenzene	ND	95	86	9.9	103	108	4.7	70 - 130	30	
o-Xylene	ND	114	96	17.1	104	106	1.9	70 - 130	30	
p-Isopropyltoluene	ND	106	96	9.9	106	112	5.5	70 - 130	30	
sec-Butylbenzene	ND	97	90	7.5	105	112	6.5	70 - 130	30	
Styrene	ND	116	100	14.8	103	105	1.9	70 - 130	30	
tert-Butylbenzene	ND	100	90	10.5	104	109	4.7	70 - 130	30	
Tetrachloroethene	ND	109	89	20.2	119	115	3.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	129	120	7.2	94	87	7.7	70 - 130	30	
Toluene	ND	96	84	13.3	96	100	4.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	98	87	11.9	103	110	6.6	70 - 130	30	
trans-1,3-Dichloropropene	ND	110	94	15.7	100	106	5.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	110	101	8.5	80	97	19.2	70 - 130	30	
Trichloroethene	ND	106	88	18.6	108	109	0.9	70 - 130	30	
Trichlorofluoromethane	ND	107	97	9.8	111	114	2.7	70 - 130	30	
Trichlorotrifluoroethane	ND	105	94	11.1	112	113	0.9	70 - 130	30	
Vinyl chloride	ND	91	91	0.0	102	104	1.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	100	101	1.0	101	101	0.0	70 - 130	30	
% Bromofluorobenzene	92	99	99	0.0	98	98	0.0	70 - 130	30	
% Dibromofluoromethane	103	110	107	2.8	99	99	0.0	70 - 130	30	
% Toluene-d8	93	94	95	1.1	93	95	2.1	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199975, QC Sample No: BB81419 (BB80628)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	96	94	2.1	99	98	1.0	70 - 130	30
1,1,1-Trichloroethane	ND	95	87	8.8	94	113	18.4	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	98	89	9.6	100	107	6.8	70 - 130	30
1,1,2-Trichloroethane	ND	99	94	5.2	101	101	0.0	70 - 130	30
1,1-Dichloroethane	ND	111	87	24.2	92	114	21.4	70 - 130	30
1,1-Dichloroethene	ND	96	94	2.1	106	104	1.9	70 - 130	30

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	87	91	4.5	98	92	6.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	100	90	10.5	88	93	5.5	70 - 130	30	
1,2,3-Trichloropropane	ND	100	91	9.4	94	105	11.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	89	87	2.3	90	88	2.2	70 - 130	30	
1,2,4-Trimethylbenzene	ND	94	93	1.1	98	97	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	107	99	7.8	101	107	5.8	70 - 130	30	
1,2-Dichlorobenzene	ND	92	90	2.2	96	93	3.2	70 - 130	30	
1,2-Dichloroethane	ND	96	91	5.3	97	97	0.0	70 - 130	30	
1,2-Dichloropropane	ND	99	97	2.0	102	100	2.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	95	94	1.1	97	97	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	89	90	1.1	97	93	4.2	70 - 130	30	
1,3-Dichloropropane	ND	98	97	1.0	99	101	2.0	70 - 130	30	
1,4-Dichlorobenzene	ND	87	87	0.0	96	92	4.3	70 - 130	30	
2,2-Dichloropropane	ND	106	84	23.2	90	114	23.5	70 - 130	30	
2-Chlorotoluene	ND	93	93	0.0	99	96	3.1	70 - 130	30	
2-Hexanone	ND	103	91	12.4	58	66	12.9	70 - 130	30	m
2-Isopropyltoluene	ND	105	106	0.9	100	95	5.1	70 - 130	30	
4-Chlorotoluene	ND	87	89	2.3	99	97	2.0	70 - 130	30	
4-Methyl-2-pentanone	ND	118	104	12.6	89	100	11.6	70 - 130	30	
Acetone	ND	123	110	11.2	<40	43	NC	70 - 130	30	m
Acrylonitrile	ND	132	97	30.6	86	118	31.4	70 - 130	30	l,r
Benzene	ND	97	96	1.0	101	99	2.0	70 - 130	30	
Bromobenzene	ND	94	94	0.0	95	96	1.0	70 - 130	30	
Bromochloromethane	ND	107	84	24.1	87	111	24.2	70 - 130	30	
Bromodichloromethane	ND	99	99	0.0	102	100	2.0	70 - 130	30	
Bromoform	ND	97	98	1.0	104	101	2.9	70 - 130	30	
Bromomethane	ND	94	105	11.1	112	94	17.5	70 - 130	30	
Carbon Disulfide	ND	116	115	0.9	107	104	2.8	70 - 130	30	
Carbon tetrachloride	ND	110	86	24.5	91	112	20.7	70 - 130	30	
Chlorobenzene	ND	89	92	3.3	98	95	3.1	70 - 130	30	
Chloroethane	ND	104	104	0.0	108	96	11.8	70 - 130	30	
Chloroform	ND	109	87	22.4	91	112	20.7	70 - 130	30	
Chloromethane	ND	102	94	8.2	92	97	5.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	107	86	21.8	92	111	18.7	70 - 130	30	
cis-1,3-Dichloropropene	ND	98	96	2.1	103	102	1.0	70 - 130	30	
Dibromochloromethane	ND	98	96	2.1	100	102	2.0	70 - 130	30	
Dibromoethane	ND	97	94	3.1	100	99	1.0	70 - 130	30	
Dibromomethane	ND	97	94	3.1	99	101	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	87	99	12.9	96	88	8.7	70 - 130	30	
Ethylbenzene	ND	92	96	4.3	100	95	5.1	70 - 130	30	
Hexachlorobutadiene	ND	88	89	1.1	90	86	4.5	70 - 130	30	
Isopropylbenzene	ND	94	95	1.1	101	100	1.0	70 - 130	30	
m&p-Xylene	ND	91	94	3.2	100	95	5.1	70 - 130	30	
Methyl ethyl ketone	ND	107	89	18.4	44	52	16.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	95	105	10.0	70 - 130	30	
Methylene chloride	ND	85	83	2.4	90	88	2.2	70 - 130	30	
n-Butylbenzene	ND	92	94	2.2	100	94	6.2	70 - 130	30	
n-Propylbenzene	ND	86	89	3.4	99	96	3.1	70 - 130	30	
o-Xylene	ND	99	104	4.9	100	96	4.1	70 - 130	30	
p-Isopropyltoluene	ND	97	99	2.0	102	97	5.0	70 - 130	30	
sec-Butylbenzene	ND	91	93	2.2	101	96	5.1	70 - 130	30	
Styrene	ND	101	104	2.9	102	97	5.0	70 - 130	30	
tert-Butylbenzene	ND	92	95	3.2	100	96	4.1	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Tetrachloroethene	ND	89	90	1.1	97	94	3.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	125	95	27.3	84	116	32.0	70 - 130	30	r
Toluene	ND	97	95	2.1	102	99	3.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	95	2.1	103	105	1.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	94	3.1	101	100	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	113	108	4.5	101	107	5.8	70 - 130	30	
Trichloroethene	ND	93	96	3.2	98	95	3.1	70 - 130	30	
Trichlorofluoromethane	ND	117	117	0.0	108	104	3.8	70 - 130	30	
Trichlorotrifluoroethane	ND	107	108	0.9	108	103	4.7	70 - 130	30	
Vinyl chloride	ND	98	102	4.0	103	95	8.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	103	99	4.0	98	100	2.0	70 - 130	30	
% Bromofluorobenzene	97	98	101	3.0	99	98	1.0	70 - 130	30	
% Dibromofluoromethane	117	113	84	29.4	84	123	37.7	70 - 130	30	r
% Toluene-d8	101	101	102	1.0	102	101	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200097, QC Sample No: BB81691 (BB80630)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	96	88	8.7	95	97	2.1	70 - 130	30	
1,1,1-Trichloroethane	ND	93	91	2.2	95	100	5.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	92	82	11.5	103	99	4.0	70 - 130	30	
1,1,2-Trichloroethane	ND	97	91	6.4	94	94	0.0	70 - 130	30	
1,1-Dichloroethane	ND	92	87	5.6	94	96	2.1	70 - 130	30	
1,1-Dichloroethene	ND	85	73	15.2	89	86	3.4	70 - 130	30	
1,1-Dichloropropene	ND	89	86	3.4	91	97	6.4	70 - 130	30	
1,2,3-Trichlorobenzene	ND	91	92	1.1	72	82	13.0	70 - 130	30	
1,2,3-Trichloropropane	ND	98	84	15.4	100	93	7.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	84	85	1.2	74	84	12.7	70 - 130	30	
1,2,4-Trimethylbenzene	ND	90	84	6.9	95	99	4.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	109	95	13.7	103	97	6.0	70 - 130	30	
1,2-Dichlorobenzene	ND	88	82	7.1	91	93	2.2	70 - 130	30	
1,2-Dichloroethane	ND	88	86	2.3	91	90	1.1	70 - 130	30	
1,2-Dichloropropane	ND	93	89	4.4	93	96	3.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	92	86	6.7	96	101	5.1	70 - 130	30	
1,3-Dichlorobenzene	ND	86	82	4.8	89	94	5.5	70 - 130	30	
1,3-Dichloropropane	ND	95	86	9.9	94	93	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	85	80	6.1	89	93	4.4	70 - 130	30	
2,2-Dichloropropane	ND	90	87	3.4	91	96	5.3	70 - 130	30	
2-Chlorotoluene	ND	91	85	6.8	97	101	4.0	70 - 130	30	
2-Hexanone	ND	100	79	23.5	51	49	4.0	70 - 130	30	m
2-Isopropyltoluene	ND	102	97	5.0	96	101	5.1	70 - 130	30	
4-Chlorotoluene	ND	86	81	6.0	95	99	4.1	70 - 130	30	
4-Methyl-2-pentanone	ND	107	96	10.8	83	81	2.4	70 - 130	30	
Acetone	ND	113	78	36.6	<40	<40	NC	70 - 130	30	m,r
Acrylonitrile	ND	112	102	9.3	82	77	6.3	70 - 130	30	
Benzene	ND	92	88	4.4	93	97	4.2	70 - 130	30	
Bromobenzene	ND	91	85	6.8	95	97	2.1	70 - 130	30	
Bromochloromethane	ND	95	89	6.5	96	95	1.0	70 - 130	30	
Bromodichloromethane	ND	94	90	4.3	94	96	2.1	70 - 130	30	
Bromoform	ND	103	93	10.2	95	94	1.1	70 - 130	30	
Bromomethane	ND	79	62	24.1	86	60	35.6	70 - 130	30	l,m,r
Carbon Disulfide	ND	98	83	16.6	89	84	5.8	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Carbon tetrachloride	ND	94	91	3.2	92	99	7.3	70 - 130	30	
Chlorobenzene	ND	89	84	5.8	91	94	3.2	70 - 130	30	
Chloroethane	ND	89	77	14.5	95	86	9.9	70 - 130	30	
Chloroform	ND	92	91	1.1	94	98	4.2	70 - 130	30	
Chloromethane	ND	86	86	0.0	83	84	1.2	70 - 130	30	
cis-1,2-Dichloroethene	ND	93	92	1.1	95	101	6.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	91	88	3.4	92	94	2.2	70 - 130	30	
Dibromochloromethane	ND	98	91	7.4	97	96	1.0	70 - 130	30	
Dibromoethane	ND	97	90	7.5	94	92	2.2	70 - 130	30	
Dibromomethane	ND	92	87	5.6	92	93	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	92	90	2.2	78	84	7.4	70 - 130	30	
Ethylbenzene	ND	91	86	5.6	91	96	5.3	70 - 130	30	
Hexachlorobutadiene	ND	83	85	2.4	72	88	20.0	70 - 130	30	
Isopropylbenzene	ND	93	86	7.8	100	105	4.9	70 - 130	30	
m&p-Xylene	ND	90	86	4.5	91	97	6.4	70 - 130	30	
Methyl ethyl ketone	ND	103	81	23.9	45	43	4.5	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	112	91	20.7	97	84	14.4	70 - 130	30	
Methylene chloride	ND	88	73	18.6	89	82	8.2	70 - 130	30	
Naphthalene	ND	93	107	14.0	79	96	19.4	70 - 130	30	
n-Butylbenzene	ND	88	85	3.5	89	97	8.6	70 - 130	30	
n-Propylbenzene	ND	85	80	6.1	96	103	7.0	70 - 130	30	
o-Xylene	ND	98	93	5.2	93	96	3.2	70 - 130	30	
p-Isopropyltoluene	ND	94	89	5.5	94	101	7.2	70 - 130	30	
sec-Butylbenzene	ND	88	84	4.7	94	101	7.2	70 - 130	30	
Styrene	ND	100	93	7.3	91	93	2.2	70 - 130	30	
tert-Butylbenzene	ND	92	86	6.7	98	104	5.9	70 - 130	30	
Tetrachloroethene	ND	90	85	5.7	95	101	6.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	109	95	13.7	92	87	5.6	70 - 130	30	
Toluene	ND	92	88	4.4	92	97	5.3	70 - 130	30	
trans-1,2-Dichloroethene	ND	95	74	24.9	101	85	17.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	91	87	4.5	88	89	1.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	111	98	12.4	94	91	3.2	70 - 130	30	
Trichloroethene	ND	94	91	3.2	91	97	6.4	70 - 130	30	
Trichlorofluoromethane	ND	101	94	7.2	88	89	1.1	70 - 130	30	
Trichlorotrifluoroethane	ND	97	87	10.9	90	89	1.1	70 - 130	30	
Vinyl chloride	ND	88	82	7.1	85	87	2.3	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	101	99	2.0	100	99	1.0	70 - 130	30	
% Bromofluorobenzene	99	100	101	1.0	97	98	1.0	70 - 130	30	
% Dibromofluoromethane	99	102	104	1.9	101	102	1.0	70 - 130	30	
% Toluene-d8	99	99	100	1.0	99	99	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200213, QC Sample No: BB81801 (BB80628 (50X))

Volatiles - Soil

Naphthalene	ND	110			>150	139	NC	70 - 130	30	m

Comment:

The LCSD is not reported for this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200188, QC Sample No: BB82167 (BB80631 (5X) , BB80634 (5X))

Volatiles - Ground Water

Trichloroethene	ND	115	104	10.0	101	94	7.2	70 - 130	30	

QA/QC Data

SDG I.D.: GBB80628

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 17, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB80628

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB80628	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	360	140	140	ug/Kg
BB80629	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB80630	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB80630	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.637	0.010	0.15	0.15	mg/L
BB80631	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80631	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	76	5.0	5	5	ug/L
BB80631	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB80631	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB80631	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB80631	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.27	0.050	0.077	0.077	ug/L
BB80631	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.005	0.002	0.002	0.002	ug/L
BB80632	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80632	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB80632	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB80632	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB80632	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.15	0.050	0.077	0.077	ug/L
BB80632	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.11	0.040	0.06	0.06	ug/L
BB80632	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.12	0.050	0.08	0.08	ug/L
BB80632	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.02	0.010	0.01	0.01	ug/L
BB80632	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.003	0.002	0.002	0.002	ug/L
BB80633	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80633	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB80633	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB80633	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB80633	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.1	0.050	0.077	0.077	ug/L
BB80633	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.09	0.040	0.06	0.06	ug/L
BB80633	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.11	0.050	0.08	0.08	ug/L
BB80633	MAGU-DAS	$PESTGAW	Aldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.004	0.003	0.0031	0.0031	ug/L
BB80633	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.003	0.002	0.002	0.002	ug/L
BB80633	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.006	0.004	0.004	0.004	mg/L
BB80633	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.026	0.002	0.015	0.015	mg/L
BB80633	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.026	0.002	0.013	0.013	mg/L
BB80634	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80634	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	76	5.0	5	5	ug/L
BB80634	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB80628

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB80634	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB80634	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB80634	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.09	0.050	0.077	0.077	ug/L
BB80634	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.007	0.002	0.002	0.002	ug/L
BB80634	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.016	0.004	0.01	0.01	mg/L
BB80634	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.016	0.004	0.004	0.004	mg/L
BB80634	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.034	0.002	0.015	0.015	mg/L
BB80634	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.034	0.002	0.013	0.013	mg/L
BB80635	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80635	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB80635	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB80635	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB80635	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.08	0.050	0.077	0.077	ug/L
BB80636	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB80636	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH CATENARY PR **Project Number:**

Laboratory Sample ID(s): BB80628, BB80629, BB80630, BB80631, BB80632, BB80633, BB80634, BB80635, BB80636

Sampling Date(s): 5/2/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Thursday, May 17, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.

Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWP criteria.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid84 05/07/12-2 (BB80631, BB80632, BB80633, BB80634, BB80635)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/7/2012

Instrument: Au-xl1 05/04/12-1 (BB80628, BB80630)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/4/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC (Batch Specific)

---------- Sample No: BB80523, QA/QC Batch: 199753 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80763, QA/QC Batch: 199989 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/07/12-1 (BB80628, BB80629, BB80630, BB80631, BB80632, BB80633, BB80634, BB80635)

Initial Calibration ECD14-050412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/7/2012

QC Comments: QC Batch 99956 05/04/12 (BB80634, BB80635)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC (Site Specific)

---------- Sample No: BB80628, QA/QC Batch: 199999 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80634, QA/QC Batch: 199956 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB77175, QA/QC Batch: 199256 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/04/12-1 (BB80628, BB80629, BB80630, BB80631, BB80632, BB80633, BB80634, BB80635)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/4/2012

QC (Site Specific)

---------- Sample No: BB80631, QA/QC Batch: 199959 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80808, QA/QC Batch: 199897 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/10/12-1 (BB80628, BB80631, BB80632, BB80633, BB80634, BB80635)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/10/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

Instrument: Icp9 05/03/12-1 (BB80628, BB80629, BB80630)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/3/2012

Instrument: Icp9 05/04/12-1 (BB80628, BB80629, BB80630)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/4/2012

Instrument: Icp9 05/05/12-1 (BB80629)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/5/2012

Instrument: Icp9 05/06/12-1 (BB80631, BB80632, BB80633, BB80634, BB80635)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/6/2012

Instrument: Icp9 05/07/12-1 (BB80631, BB80632, BB80633, BB80634, BB80635)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/7/2012

Instrument: Icp9 05/08/12-1 (BB80628)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/8/2012

Instrument: Icp9 05/09/12-1 (BB80628)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/9/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC (Site Specific)

---------- Sample No: BB80628, QA/QC Batch: 199835 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80629, QA/QC Batch: 199961 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80634, QA/QC Batch: 199868 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80494, QA/QC Batch: 199757 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd6 05/04/12-1 (BB80628, BB80629, BB80630)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/4/2012

Instrument: Au-ecd7 05/03/12-1 (BB80628, BB80629, BB80630)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/3/2012

Instrument: Au-ecd7 05/07/12-1 (BB80631, BB80632, BB80633, BB80634, BB80635)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/7/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC (Batch Specific)

---------- Sample No: BB79693, QA/QC Batch: 199869 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB79766, QA/QC Batch: 199724 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 05/07/12-1 (BB80631, BB80632, BB80634, BB80635)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/7/2012

Instrument: Au-ecd4 05/06/12-1 (BB80628, BB80629, BB80630)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/6/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC Comments: QC Batch 99755 05/02/12 (BB80631, BB80632, BB80633, BB80634, BB80635)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB79766, QA/QC Batch: 199744 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB79767, QA/QC Batch: 199755 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199719 (Samples: BB80628, BB80629, BB80630): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

QC Batch 199838 (Samples: BB80631, BB80632, BB80633, BB80634, BB80635): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

Instrument: Chem07 05/03/12-1 (BB80628, BB80629, BB80630)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/SV_0410):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrophenol, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 4-Chloroaniline, 3-Nitroaniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/3/2012

Instrument: Chem09 05/07/12-1 (BB80631, BB80632, BB80633)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0427):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 4-chloroaniline, Hexachlorocyclopentadiene, 2,4-dinitrophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Pyridine, Benzaldehyde, Hexachlorocyclopentadiene, 1,2,4,5-Tetrachlorobenzene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/7/2012

Instrument: Chem12 05/08/12-1 (BB80634, BB80635)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Hexachlorocyclopentadiene, Atrazine, Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 5/8/2012

QC Comments: QC Batch 99838 05/03/12 (BB80631, BB80632, BB80633, BB80634, BB80635)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB79766, QA/QC Batch: 199719 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4-Chloroaniline(149%), Pyridine(27%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(8.2%), 2-Nitroaniline(>150%), 4-Chloroaniline(146%), Pyridine(27%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80503, QA/QC Batch: 199838 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 3-Nitroaniline(133%), Hexachlorocyclopentadiene(23%), Pyridine(14%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 2-Nitroaniline(133%), 3-Nitroaniline(131%), Hexachlorocyclopentadiene(24%), Pyridine(14%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 05/07/12-1 (BB80631, BB80632, BB80633, BB80634, BB80635)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0424):

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-nitrosodimethylamine, % 2,4,6-Tribromophenol, Pentachloronitrobenzene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/7/2012

QC Comments: QC Batch 99838 05/03/12 (BB80631, BB80632, BB80633, BB80634, BB80635)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199975 (Samples: BB80628): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Acrylonitrile)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

QC Batch 200097 (Samples: BB80630): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

QC Batch 200100 (Samples: BB80629): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Acrylonitrile)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (2-Hexanone, Acetone, Bromomethane, Chloroethane, Methyl ethyl ketone, Trichlorofluoromethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

QC Batch 200105 (Samples: BB80631, BB80632, BB80633, BB80634, BB80635, BB80636): -----

The LCS/LCSD recoveries are above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Methyl t-butyl ether (MTBE), Naphthalene, 2,2-Dichloropropane)

The MS and/or MSD recovery for one or more compounds is below range. All other QC is within criteria. No significant bias is suspected. (2-Hexanone)

QC Batch 199975 (Samples: BB80628): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Acrylonitrile)

QC Batch 200097 (Samples: BB80630): -----

The LCS and/or LCSD recovery for one or more compounds is below range. All other QC is within criteria. No significant bias is suspected. (Bromomethane)

Instrument: Chem02 05/04/12-1 (BB80631, BB80632, BB80633, BB80634, BB80635, BB80636)

P-Side
Initial Calibration (RPP_0504):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Chloroethane, Acetone, 2,2-

dichloropropane, 2-hexanone, Trans-1,4-dichloro-2-butene, Naphthalene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Acrolein, Acetone, 2-Hexanone, Naphthalene

Printed Name Tina Covensky
Position: Chemist
Date: 5/4/2012

Instrument: Chem02 05/07/12-1 (BB80631, BB80634)

P-Side
Initial Calibration (RPP_0507):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Toluene, M&p-xylene, O-xylene, Styrene, Naphthalene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: 2-Hexanone

Printed Name Tina Covensky
Position: Chemist
Date: 5/7/2012

Instrument: Chem03 05/04/12-1 (BB80630)

Initial Calibration Verification (RCPS_0502):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Acrolein

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/4/2012

Instrument: Chem03 05/07/12-1 (BB80628)

Initial Calibration Verification (RCPX_0507):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: M&p-xylene, O-xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-tetrachloroethane, Bromobenzene, N-propylbenzene, 2-chlorotoluene, 1,3,5-trimethylbenzene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

The following compounds had % Deviations >20%: Tetrahydrofuran (THF), o-Xylene, 1,1,2,2-Tetrachloroethane, Bromobenzene, 1,2,3-Trichloropropane, n-Propylbenzene, 2-Chlorotoluene

Printed Name Johanna Harrington
Position: Chemist
Date: 5/7/2012

Instrument: Chem11 05/03/12-1 (BB80628)

Initial Calibration Verification (CHEM11/RCPS_0502):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Methylene Chloride, Acrylonitrile

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 5/3/2012

Instrument: Chem11 05/04/12-1 (BB80628, BB80629)

Initial Calibration Verification (CHEM11/RCPS_0502):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%:

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Acrylonitrile, Tetrahydrofuran (THF), Carbon Tetrachloride

Printed Name Johanna Harrington
Position: Chemist
Date: 5/4/2012

QC Comments: QC Batch 00188 05/08/12 (BB80631, BB80634)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 00213 05/08/12 (BB80628)

The LCSD is not reported for this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

QC (Site Specific)

---------- Sample No: BB80629, QA/QC Batch: 200100 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Acrylonitrile(135%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Acrylonitrile(36.8%)

All MS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(59%), Acetone(45%), Methyl ethyl ketone(45%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(62%), Acetone(51%), Methyl ethyl ketone(56%)

All MS/MSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(35.3%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80763, QA/QC Batch: 200105 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Methyl t-butyl ether (MTBE)(>150%), Naphthalene(138%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(137%), Methyl t-butyl ether (MTBE)(149%), Naphthalene(144%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB81419, QA/QC Batch: 199975 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Acrylonitrile(132%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Acrylonitrile(30.6%)

---------- Sample No: BB81691, QA/QC Batch: 200097 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromomethane(62%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Acetone(36.6%)

---------- Sample No: BB81801, QA/QC Batch: 200213 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

---------- Sample No: BB82167, QA/QC Batch: 200188 ----------

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB80628

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 4 OWL Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MCI

Project P.O:
Phone #: 860 2249141
Fax #: 860 2249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-2-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Dissolved RCRA 8 Metals					Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [✓] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
806028	GP-41 10'-12'	S	5-2-12	6:31am	X	X	X	X	X	X	X						3	2								
806029	GP-42 10'-12'	↓	↓	7:49am	↓	↓	↓	↓	↓	↓	X						↓	↓								
806030	GP-43 10'-12'	↓	↓	8:32am	↓	↓	↓	↓	↓	↓	X						↓	↓								
806031	GP-41 GW	GW	↓	7:00am	↓	↓	↓	↓	↓	↓		X								3	6		2			
806032	GP-43 GW	↓	↓	9:41am	↓	↓	↓	↓	↓	↓		X								↓	↓		↓			
806033	GP-46 GW	↓	↓	11:11am	↓	↓	↓	↓	↓	↓		X								↓	↓		↓			
806034	GP-49 GW	↓	↓	12:04pm	↓	↓	↓	↓	↓	↓		X								↓	↓		↓			
806035	GP-50 GW	↓	↓	1:50pm	↓	↓	↓	↓	↓	↓		X								↓	↓		↓			
806036	TB-10	GW	↓	—	↓															2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/3/12	8:30
[signature]	[signature]	5/3/12	11:26

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

PHOENIX
Environmental Laboratories, Inc.

Friday, June 08, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB91848 - BB91867

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	8:07
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91848

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-16 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	06/01/12		LK	6010
Arsenic	42.5	0.75	mg/Kg	06/01/12		LK	6010
Barium	123	0.38	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.38	0.38	mg/Kg	06/01/12		LK	6010
Chromium	13.8	0.38	mg/Kg	06/01/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	192	3.8	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.185	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	85		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91848

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	107		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	370	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	95		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	62		%	06/02/12		MH	30 - 150 %
% TCMX	46		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	37	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	37	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.8	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	58	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.8	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	37	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.8	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91848

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	52		%	06/04/12		KCA	30 - 150 %
% TCMX	54		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91848

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	89		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	126		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	98		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1200	270	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91848

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	440	270	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	280	270	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1700	270	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	470	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1500	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3200	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1300	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	880	270	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2800	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	560	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	390	270	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	3000	270	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1200	270	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1200	270	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91848

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1900	270	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2700	270	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	73		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	81		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	84		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	84		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	69		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	8:41
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91849

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-17 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	06/01/12		LK	6010
Arsenic	17.8	0.74	mg/Kg	06/01/12		LK	6010
Barium	47.5	0.37	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.37	0.37	mg/Kg	06/01/12		LK	6010
Chromium	15.1	0.37	mg/Kg	06/01/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	111	0.37	mg/Kg	06/01/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.019	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	0.0009	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.019	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	85		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-17 1-3 FT

Phoenix I.D.: BB91849

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	113		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	76	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	68		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	06/02/12		MH	30 - 150 %
% TCMX	44		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	39		%	06/04/12		KCA	30 - 150 %
% TCMX	38		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-17 1-3 FT

Phoenix I.D.: BB91849

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	79		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	74		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	101		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-17 1-3 FT

Phoenix I.D.: BB91849

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1200	270	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	470	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1000	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	1900	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	840	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	630	270	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	580	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	1500	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	310	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	2300	270	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	770	270	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-17 1-3 FT

Phoenix I.D.: BB91849

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	950	270	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	1900	270	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	99		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	77		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	90		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	89		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	95		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	76		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	9:18
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91850

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-18 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	06/01/12		LK	6010
Arsenic	17.9	0.87	mg/Kg	06/01/12		LK	6010
Barium	70.9	0.43	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.43	0.43	mg/Kg	06/01/12		LK	6010
Chromium	14.4	0.43	mg/Kg	06/01/12		LK	6010
Mercury	0.19	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	483	4.3	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	0.005	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.011	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	0.0008	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.103	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	78		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-18 1-3 FT

Phoenix I.D.: BB91850

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	530	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	53	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	110	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	53	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	110	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	110		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	480	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	98		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	420	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	61		%	06/02/12		MH	30 - 150 %
% TCMX	34		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	41	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	41	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	41	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.4	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	64	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.4	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	41	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.4	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	13	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	78		%	06/04/12		KCA	30 - 150 %
% TCMX	44		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-18 1-3 FT

Phoenix I.D.: BB91850

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	85		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	75		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	94		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1300	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-18 1-3 FT

Phoenix I.D.: BB91850

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1100	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	710	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	3900	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	500	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	2900	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	4900	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1900	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	1100	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	630	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5700	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	740	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	440	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	4900	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1700	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1500	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-18 1-3 FT

Phoenix I.D.: BB91850

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	3900	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	5600	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	78		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	71		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	55		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	84		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	67		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	59		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	9:29
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91851

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-19 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Arsenic	25.0	0.85	mg/Kg	06/01/12		LK	6010
Barium	70.4	0.42	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Chromium	11.3	0.42	mg/Kg	06/01/12		LK	6010
Mercury	0.19	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	318	4.2	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	0.007	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	0.0005	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.089	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-19 1-3 FT

Phoenix I.D.: BB91851

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	98		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	190	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	79		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	60		%	06/02/12		MH	30 - 150 %
% TCMX	33		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	62	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.2	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-19 1-3 FT

Phoenix I.D.: BB91851

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	68		%	06/04/12		KCA	30 - 150 %
% TCMX	41		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.9	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	32	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	32	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.9	ug/Kg	06/02/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	39	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	6.4	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	126		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	770	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-19 1-3 FT

Phoenix I.D.: BB91851

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	330	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1200	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	920	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	1800	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	710	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	480	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	620	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2200	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	1700	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	610	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	710	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-19 1-3 FT

Phoenix I.D.: BB91851

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1600	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	1700	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	73		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	70		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	60		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	84		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	71		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	55		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	10:09
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91852

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-23 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	06/01/12		LK	6010
Arsenic	10.4	0.73	mg/Kg	06/01/12		LK	6010
Barium	27.1	0.36	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.36	0.36	mg/Kg	06/01/12		LK	6010
Chromium	47.6	0.36	mg/Kg	06/01/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	6180	36	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.930	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	87		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-23 2-4 FT

Phoenix I.D.: BB91852

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	480	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	95	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	95	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	102		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	240	11	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	106		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	76		%	06/02/12		MH	30 - 150 %
% TCMX	62		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	37	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	37	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.7	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	57	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.7	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	37	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	37	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.7	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	70		%	06/04/12		KCA	30 - 150 %
% TCMX	64		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-23 2-4 FT

Phoenix I.D.: BB91852

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	77		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	77		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	100		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	600	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-23 2-4 FT

Phoenix I.D.: BB91852

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	600	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	600	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	600	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	700	260	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	490	260	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	2900	260	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	450	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	2300	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3900	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1600	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	1500	260	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	560	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	3200	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	660	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	4300	260	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1600	260	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-23 2-4 FT

Phoenix I.D.: BB91852

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1800	260	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	3500	260	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	80		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	96		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	94		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	61		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	10:43
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91853

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-24 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.50	0.50	mg/Kg	06/01/12		LK	6010
Arsenic	76.6	0.99	mg/Kg	06/04/12		EK	6010
Barium	90.8	0.50	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.50	0.50	mg/Kg	06/01/12		LK	6010
Chromium	26.5	0.50	mg/Kg	06/01/12		LK	6010
Mercury	0.33	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	1970	50	mg/Kg	06/04/12		EK	6010
Selenium	< 2.0	2.0	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	0.005	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.012	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.071	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	68		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	60	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	600	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	60	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	120	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	60	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	120	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	129		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	1000	28	mg/Kg	06/04/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	132		%	06/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	480	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	480	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	71		%	06/02/12		MH	30 - 150 %
% TCMX	47		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	46	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	46	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	46	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	23	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	20	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	66	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	23	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	7.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	23	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	46	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	46	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	7.2	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	13	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	230	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	230	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	48		%	06/04/12		KCA	30 - 150 %
% TCMX	48		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	37	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	37	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	150	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	4.4	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	7.0	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	44	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	15	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	7.4	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	129		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	780	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	2900	340	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	340	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	490	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	330	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	490	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	340	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	780	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	3000	340	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	2200	340	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	11000	340	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	7900	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	13000	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	3300	340	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	2800	340	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1400	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	900	730	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	15000	340	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	1700	340	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	810	340	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	16000	340	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	3400	340	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	3300	340	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	340	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	490	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-24 1-3 FT

Phoenix I.D.: BB91853

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	340	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	6700	340	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	340	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	21000	340	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	86		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	70		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	76		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	78		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	77		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	60		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	11:04
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91854

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-25 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		LK	6010
Arsenic	20.4	0.78	mg/Kg	06/01/12		LK	6010
Barium	66.5	0.39	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.39	0.39	mg/Kg	06/01/12		LK	6010
Chromium	14.3	0.39	mg/Kg	06/01/12		LK	6010
Mercury	0.27	0.10	mg/Kg	06/01/12		RS	SW-7471
Lead	363	3.9	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.013	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.046	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	82		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-25 1-3 FT

Phoenix I.D.: BB91854

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	106		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	340	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	98		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	62		%	06/02/12		MH	30 - 150 %
% TCMX	46		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-25 1-3 FT

Phoenix I.D.: BB91854

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	65		%	06/04/12		KCA	30 - 150 %
% TCMX	46		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	32	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	32	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.8	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-25 1-3 FT

Phoenix I.D.: BB91854

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	38	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	6.3	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	77		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	103		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1200	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-25 1-3 FT

Phoenix I.D.: BB91854

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	880	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	630	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	2800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	2300	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3900	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1100	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	950	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	3900	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	550	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	400	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	3800	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1100	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1100	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-25 1-3 FT

Phoenix I.D.: BB91854

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	3800	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	4100	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	81		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	82		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	85		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	62		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	11:31
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91855

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-26 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	06/01/12		LK	6010
Arsenic	25.6	0.80	mg/Kg	06/01/12		LK	6010
Barium	96.9	0.40	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.40	0.40	mg/Kg	06/01/12		LK	6010
Chromium	31.7	0.40	mg/Kg	06/01/12		LK	6010
Mercury	0.17	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1910	40	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.100	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.193	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	86		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	48	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	480	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	96	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	48	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	96	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	98		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	420	11	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	126		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	64		%	06/02/12		MH	30 - 150 %
% TCMX	50		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	56		%	06/04/12		KCA	30 - 150 %
% TCMX	57		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	106		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	92		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	100		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	610	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1600	260	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	610	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	560	260	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	490	260	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1900	260	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	450	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1500	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	2600	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	790	260	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	840	260	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	570	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2400	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	370	260	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	530	260	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	3000	260	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	280	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	760	260	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1400	260	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-26 1-3 FT

Phoenix I.D.: BB91855

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	380	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	3400	260	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	260	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2500	260	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	380	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	83		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	79		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	84		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	60		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	11:56
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91856

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-27 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	06/01/12		LK	6010
Arsenic	22.7	0.80	mg/Kg	06/01/12		LK	6010
Barium	97.2	0.40	mg/Kg	06/01/12		LK	6010
Cadmium	0.66	0.40	mg/Kg	06/01/12		LK	6010
Chromium	22.2	0.40	mg/Kg	06/01/12		LK	6010
Mercury	0.32	0.10	mg/Kg	06/01/12		RS	SW-7471
Lead	1150	4.0	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.013	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.090	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	79		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	52	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	520	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	52	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	52	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	112		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	380	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	117		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	420	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	420	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	68		%	06/02/12		MH	30 - 150 %
% TCMX	51		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	40	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	40	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	40	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	62	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	40	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	40	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.2	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	85		%	06/04/12		KCA	30 - 150 %
% TCMX	64		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	32	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	32	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	38	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	107		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	70		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	113		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	95		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1500	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1100	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	880	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	3300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	510	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	2700	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	2000	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	630	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	590	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	470	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	4900	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-27 1-3 FT

Phoenix I.D.: BB91856

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4100	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	5300	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	67		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	74		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	06/01/12		KCA	15 - 130 %

Comments:

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	12:39
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91857

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-28 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Arsenic	22.8	0.83	mg/Kg	06/01/12		LK	6010
Barium	60.6	0.42	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Chromium	14.9	0.42	mg/Kg	06/01/12		LK	6010
Mercury	0.18	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	424	4.2	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.020	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.071	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	79		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 2-4 FT

Phoenix I.D.: BB91857

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	53	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	530	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	53	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	53	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	104		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	430	13	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	85		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	06/02/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	06/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	62		%	06/02/12		MH	30 - 150 %
% TCMX	57		%	06/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	62	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.2	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.2	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 2-4 FT

Phoenix I.D.: BB91857

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	78		%	06/04/12		KCA	30 - 150 %
% TCMX	61		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Chloromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	3.8	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 2-4 FT

Phoenix I.D.: BB91857

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	38	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	6.3	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	84		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	121		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1400	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 2-4 FT

Phoenix I.D.: BB91857

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	670	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1200	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	1000	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	3800	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	500	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	3100	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	5600	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1200	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	1100	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	630	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5400	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	510	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	450	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	5100	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1200	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1400	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-28 2-4 FT

Phoenix I.D.: BB91857

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	420	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4000	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	5800	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	420	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	81		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	78		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	74		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	59		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	13:14
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91858

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-29 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.44	0.44	mg/Kg	06/01/12		LK	6010
Arsenic	20.8	0.88	mg/Kg	06/01/12		LK	6010
Barium	73.3	0.44	mg/Kg	06/01/12		LK	6010
Cadmium	0.59	0.44	mg/Kg	06/01/12		LK	6010
Chromium	16.5	0.44	mg/Kg	06/01/12		LK	6010
Mercury	0.13	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1360	44	mg/Kg	06/04/12		EK	6010
Selenium	< 1.8	1.8	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.016	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.016	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	111		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	220	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	68		%	06/01/12		MH	30 - 150 %
% TCMX	46		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	55		%	06/04/12		KCA	30 - 150 %
% TCMX	48		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4	ug/Kg	06/04/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,1-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,2-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,3-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
2,2-Dichloropropane	ND	6	ug/Kg	06/04/12		H/J	SW8260
2-Chlorotoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
2-Isopropyltoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
4-Chlorotoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/04/12		H/J	SW8260
Acetone	ND	123	ug/Kg	06/04/12		H/J	SW8260
Acrylonitrile	ND	6	ug/Kg	06/04/12		H/J	SW8260
Benzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromochloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromodichloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromoform	ND	6	ug/Kg	06/04/12		H/J	SW8260
Bromomethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Carbon Disulfide	ND	6	ug/Kg	06/04/12		H/J	SW8260
Carbon tetrachloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chlorobenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chloroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chloroform	ND	6	ug/Kg	06/04/12		H/J	SW8260
Chloromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Dibromochloromethane	ND	4	ug/Kg	06/04/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Dibromomethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Dichlorodifluoromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Ethylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Hexachlorobutadiene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Isopropylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
m&p-Xylene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/04/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/04/12		H/J	SW8260
Methylene chloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
Naphthalene	ND	6	ug/Kg	06/04/12		H/J	SW8260
n-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
n-Propylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
o-Xylene	ND	6	ug/Kg	06/04/12		H/J	SW8260
p-Isopropyltoluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
sec-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Styrene	ND	6	ug/Kg	06/04/12		H/J	SW8260
tert-Butylbenzene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Tetrachloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/04/12		H/J	SW8260
Toluene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Total Xylenes	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6	ug/Kg	06/04/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/04/12		H/J	SW8260
Trichloroethene	ND	6	ug/Kg	06/04/12		H/J	SW8260
Trichlorofluoromethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6	ug/Kg	06/04/12		H/J	SW8260
Vinyl chloride	ND	6	ug/Kg	06/04/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	06/04/12		H/J	70 - 130 %
% Bromofluorobenzene	88		%	06/04/12		H/J	70 - 130 %
% Dibromofluoromethane	73		%	06/04/12		H/J	70 - 130 %
% Toluene-d8	103		%	06/04/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	930	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	700	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	410	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1300	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	2200	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	690	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	620	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2400	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	330	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	320	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	640	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1000	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-29 1-3 FT

Phoenix I.D.: BB91858

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1900	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2300	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	96		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	77		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	82		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	80		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	79		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	67		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

8260 analysis comments:
Sample exhibited severe matrix interference. Both Low-level vials were analyzed with very poor internal standard response. The high level analysis did not exhibit this interference. Had any compounds been detected in the high level analysis, they would have been reported at that dilution. The low level analysis was reported, in order to meet the requested reporting criteria, the surrogate recoveries are from the high level analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	13:40
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91859

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-30 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Arsenic	38.2	0.84	mg/Kg	06/01/12		LK	6010
Barium	76.2	0.42	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.42	0.42	mg/Kg	06/01/12		LK	6010
Chromium	15.2	0.42	mg/Kg	06/01/12		LK	6010
Mercury	0.10	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	365	4.2	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.014	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.012	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	83		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 1-3 FT

Phoenix I.D.: BB91859

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	115		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	130	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	87		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	66		%	06/01/12		MH	30 - 150 %
% TCMX	42		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 1-3 FT

Phoenix I.D.: BB91859

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	51		%	06/04/12		KCA	30 - 150 %
% TCMX	44		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	06/05/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	06/05/12		H/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	06/05/12		H/J	SW8260
Acetone	ND	100	ug/Kg	06/05/12		H/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Benzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Bromoform	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Bromomethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Chloroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Chloroform	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Chloromethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	06/05/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 1-3 FT

Phoenix I.D.: BB91859

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	06/05/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	06/05/12		H/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Naphthalene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
o-Xylene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Styrene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	06/05/12		H/J	SW8260
Toluene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	06/05/12		H/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	06/05/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	107		%	06/05/12		H/J	70 - 130 %
% Bromofluorobenzene	76		%	06/05/12		H/J	70 - 130 %
% Dibromofluoromethane	124		%	06/05/12		H/J	70 - 130 %
% Toluene-d8	97		%	06/05/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	570	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 1-3 FT

Phoenix I.D.: BB91859

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	610	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	410	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	2000	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1600	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3100	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	760	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	920	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2800	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	390	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	820	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	610	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-30 1-3 FT

Phoenix I.D.: BB91859

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1900	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	83		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	74		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	78		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	60		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	13:54
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91860

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-31 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	06/01/12		LK	6010
Arsenic	28.5	0.82	mg/Kg	06/01/12		LK	6010
Barium	69.2	0.41	mg/Kg	06/01/12		LK	6010
Cadmium	< 0.41	0.41	mg/Kg	06/01/12		LK	6010
Chromium	16.4	0.41	mg/Kg	06/01/12		LK	6010
Mercury	0.13	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	286	4.1	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.015	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.017	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-31 1-3 FT

Phoenix I.D.: BB91860

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	112		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	140	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	90		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	78		%	06/01/12		MH	30 - 150 %
% TCMX	54		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/05/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/05/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/05/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/05/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/05/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/05/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/05/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/05/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/05/12		KCA	SW8081
Dieldrin	ND	6.0	ug/Kg	06/05/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/05/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/05/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/05/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/05/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/05/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/05/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/05/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-31 1-3 FT

Phoenix I.D.: BB91860

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/05/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/05/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/05/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/05/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	91		%	06/05/12		KCA	30 - 150 %
% TCMX	50		%	06/05/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	06/06/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	06/06/12		H/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	06/06/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/06/12		H/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Benzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Bromoform	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Bromomethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Chloroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Chloroform	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Chloromethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	06/06/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-31 1-3 FT

Phoenix I.D.: BB91860

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
m&p-Xylene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	06/06/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/06/12		H/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Naphthalene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
o-Xylene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Styrene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/06/12		H/J	SW8260
Toluene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Total Xylenes	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/06/12		H/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	06/06/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	06/06/12		H/J	70 - 130 %
% Bromofluorobenzene	90		%	06/06/12		H/J	70 - 130 %
% Dibromofluoromethane	70		%	06/06/12		H/J	70 - 130 %
% Toluene-d8	103		%	06/06/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	550	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-31 1-3 FT

Phoenix I.D.: BB91860

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	630	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	410	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	2300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1800	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3800	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	950	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	820	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	620	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	3300	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	440	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	4000	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1000	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	580	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-31 1-3 FT

Phoenix I.D.: BB91860

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1600	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	3600	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	78		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	80		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	78		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	67		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:06
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91861

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-32 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	06/01/12		EK	6010
Arsenic	26.4	0.83	mg/Kg	06/01/12		EK	6010
Barium	72.0	0.41	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.41	0.41	mg/Kg	06/01/12		EK	6010
Chromium	14.4	0.41	mg/Kg	06/01/12		EK	6010
Mercury	0.10	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	325	4.1	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.016	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.017	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	84		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-32 1-3 FT

Phoenix I.D.: BB91861

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	99	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	99	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	106		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	170	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	93		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	74		%	06/01/12		MH	30 - 150 %
% TCMX	52		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-32 1-3 FT

Phoenix I.D.: BB91861

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	56		%	06/04/12		KCA	30 - 150 %
% TCMX	52		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.9	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	33	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	130	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.9	ug/Kg	06/02/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	39	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	6.5	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	108		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	76		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	128		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	98		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	630	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	510	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-32 1-3 FT

Phoenix I.D.: BB91861

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	630	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	630	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	630	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	820	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	550	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	2100	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	470	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	3000	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	770	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	810	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	3200	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	370	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	780	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	560	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-32 1-3 FT

Phoenix I.D.: BB91861

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1500	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	3300	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	74		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	77		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	73		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	66		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:19
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91862

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-33 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	06/01/12		EK	6010
Arsenic	22.7	0.83	mg/Kg	06/01/12		EK	6010
Barium	81.6	0.41	mg/Kg	06/01/12		EK	6010
Cadmium	0.75	0.41	mg/Kg	06/01/12		EK	6010
Chromium	22.2	0.41	mg/Kg	06/01/12		EK	6010
Mercury	0.29	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1300	41	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.064	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	83		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	104		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	370	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	96		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	66		%	06/01/12		MH	30 - 150 %
% TCMX	51		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	83		%	06/04/12		KCA	30 - 150 %
% TCMX	57		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	06/06/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,1-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,2-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,3-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2,2-Dichloropropane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2-Chlorotoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
2-Hexanone	ND	30	ug/Kg	06/06/12		H/J	SW8260
2-Isopropyltoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
4-Chlorotoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	06/06/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/06/12		H/J	SW8260
Acrylonitrile	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Benzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromochloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromodichloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromoform	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Bromomethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Carbon Disulfide	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Carbon tetrachloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chlorobenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chloroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chloroform	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Chloromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	06/06/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Dibromomethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Ethylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Hexachlorobutadiene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Isopropylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
m&p-Xylene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	06/06/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/06/12		H/J	SW8260
Methylene chloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Naphthalene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
n-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
n-Propylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
o-Xylene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
p-Isopropyltoluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
sec-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Styrene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
tert-Butylbenzene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Tetrachloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/06/12		H/J	SW8260
Toluene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Total Xylenes	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/06/12		H/J	SW8260
Trichloroethene	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Trichlorofluoromethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
Vinyl chloride	ND	6.0	ug/Kg	06/06/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	06/06/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	06/06/12		H/J	70 - 130 %
% Dibromofluoromethane	119		%	06/06/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/06/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1500	270	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1200	270	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	940	270	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	4100	270	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	470	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	3000	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	5900	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1300	270	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	1800	270	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	590	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	5800	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	560	270	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	450	270	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	5700	270	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1300	270	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1400	270	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-33 1-3 FT

Phoenix I.D.: BB91862

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	390	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4000	270	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	6100	270	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	390	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	69		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	78		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	73		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:38
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91863

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-34 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		EK	6010
Arsenic	52.1	0.83	mg/Kg	06/01/12		EK	6010
Barium	78.6	0.42	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.42	0.42	mg/Kg	06/01/12		EK	6010
Chromium	19.3	0.42	mg/Kg	06/01/12		EK	6010
Mercury	0.24	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1620	42	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	0.009	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.015	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.106	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	680	24	mg/Kg	06/04/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	87		%	06/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	06/01/12		MH	30 - 150 %
% TCMX	69		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.0	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	60	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	30	6.0	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.0	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	112		%	06/04/12		KCA	30 - 150 %
% TCMX	80		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	108		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	78		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	128		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	2100	280	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	2000	280	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	7400	280	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	5800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	10000	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1800	280	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	3700	280	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	1200	600	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	11000	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	1000	280	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	700	280	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	11000	280	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	560	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	2000	280	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	2700	280	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-34 1-3 FT

Phoenix I.D.: BB91863

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	7000	280	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	14000	280	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	80		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	69		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	75		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	69		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	71		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	14:49
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91864

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-35 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	06/01/12		EK	6010
Arsenic	15.1	0.87	mg/Kg	06/01/12		EK	6010
Barium	81.5	0.43	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.43	0.43	mg/Kg	06/01/12		EK	6010
Chromium	12.5	0.43	mg/Kg	06/01/12		EK	6010
Mercury	0.22	0.10	mg/Kg	06/01/12		RS	SW-7471
Lead	311	4.3	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.015	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.065	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	77		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-35 1-3 FT

Phoenix I.D.: BB91864

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	54	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	54	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	54	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	540	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	54	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	110	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	54	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	110	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	400	13	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	114		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	430	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	430	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	84		%	06/01/12		MH	30 - 150 %
% TCMX	72		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	41	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	41	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	41	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.4	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	64	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.4	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	41	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	41	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.4	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-35 1-3 FT

Phoenix I.D.: BB91864

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	13	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	69		%	06/04/12		KCA	30 - 150 %
% TCMX	70		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Chloromethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	06/01/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-35 1-3 FT

Phoenix I.D.: BB91864

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	6.0	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	95		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	102		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	100		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	690	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	1100	300	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-35 1-3 FT

Phoenix I.D.: BB91864

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	300	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	690	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	430	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	300	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	690	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1300	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	430	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	300	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	690	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1300	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	1600	300	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	1100	300	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	430	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	5100	300	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	520	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	3800	300	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	6200	300	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	1400	300	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	2000	300	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1300	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	430	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	650	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	6300	300	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	710	300	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	380	300	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	8500	300	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1500	300	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	1300	300	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	300	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	430	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-35 1-3 FT

Phoenix I.D.: BB91864

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	300	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	430	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	430	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	430	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	4800	300	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	300	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	9300	300	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	430	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	80		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	73		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	70		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	73		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	69		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/30/12	15:00
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91865

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-36 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	06/01/12		EK	6010
Arsenic	28.7	0.81	mg/Kg	06/01/12		EK	6010
Barium	93.2	0.41	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.41	0.41	mg/Kg	06/01/12		EK	6010
Chromium	12.5	0.41	mg/Kg	06/01/12		EK	6010
Mercury	0.18	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	298	4.1	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	06/01/12		EK	6010
SPLP Barium	0.013	0.010	mg/L	06/01/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	06/01/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	06/01/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	06/04/12		RS	1312/SW7470
SPLP Lead	0.021	0.010	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	06/01/12		EK	6010
Total Metals Digest	Completed			05/31/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			06/01/12		X/X	SW846-3005
Percent Solid	81		%	05/31/12		JL	E160.3
Soil Extraction for PCB	Completed			05/31/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			05/31/12		RB	SW3545
Soil Extraction for SVOA	Completed			05/31/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/31/12		NS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			06/04/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/31/12		X	EPA 1312
Field Extraction	Completed			05/30/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-36 1-3 FT

Phoenix I.D.: BB91865

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	85		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	88	12	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	50		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	06/01/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	06/01/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	104		%	06/01/12		MH	30 - 150 %
% TCMX	98		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/04/12		KCA	SW8081
4,4' -DDT	ND	39	ug/Kg	06/04/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/04/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/04/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/04/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/04/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/04/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/04/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/04/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-36 1-3 FT

Phoenix I.D.: BB91865

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/04/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/04/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	108		%	06/04/12		KCA	30 - 150 %
% TCMX	86		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Chloromethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-36 1-3 FT

Phoenix I.D.: BB91865

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	94		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	97		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	102		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrophenol	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Chlorophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Methylnaphthalene	670	290	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-36 1-3 FT

Phoenix I.D.: BB91865

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	06/01/12		KCA	SW 8270
2-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
2-Nitrophenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	06/01/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
3-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chloroaniline	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
4-Nitroaniline	ND	660	ug/Kg	06/01/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Acenaphthylene	450	290	ug/Kg	06/01/12		KCA	SW 8270
Acetophenone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Anthracene	330	290	ug/Kg	06/01/12		KCA	SW 8270
Azobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Benz(a)anthracene	1300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzidine	ND	490	ug/Kg	06/01/12		KCA	SW 8270
Benzo(a)pyrene	1200	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(b)fluoranthene	2300	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(ghi)perylene	570	290	ug/Kg	06/01/12		KCA	SW 8270
Benzo(k)fluoranthene	800	290	ug/Kg	06/01/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	06/01/12		KCA	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Carbazole	ND	610	ug/Kg	06/01/12		KCA	SW 8270
Chrysene	2000	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dibenzofuran	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Diethyl phthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Dimethylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Fluoranthene	1900	290	ug/Kg	06/01/12		KCA	SW 8270
Fluorene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Hexachloroethane	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	570	290	ug/Kg	06/01/12		KCA	SW 8270
Isophorone	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Naphthalene	560	290	ug/Kg	06/01/12		KCA	SW 8270
Nitrobenzene	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-36 1-3 FT

Phoenix I.D.: BB91865

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	06/01/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachloronitrobenzene	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Pentachlorophenol	ND	410	ug/Kg	06/01/12		KCA	SW 8270
Phenanthrene	1400	290	ug/Kg	06/01/12		KCA	SW 8270
Phenol	ND	290	ug/Kg	06/01/12		KCA	SW 8270
Pyrene	1900	290	ug/Kg	06/01/12		KCA	SW 8270
Pyridine	ND	410	ug/Kg	06/01/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	64		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	60		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	49		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	65		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	55		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	55		%	06/01/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/30/12	16:40
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91866

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: FB-3

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	06/01/12		LK	6010/200.7
Arsenic	0.004	0.004	mg/L	06/01/12		LK	6010/200.7
Barium	0.012	0.002	mg/L	06/01/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	06/01/12		LK	6010/200.7
Chromium	0.001	0.001	mg/L	06/01/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	06/01/12		RS	SW7470/245.1
Lead	< 0.002	0.002	mg/L	06/01/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	06/01/12		LK	6010/200.7
Total Metals Digestion	Completed			05/31/12		AG	
Extraction of CT ETPH	Completed			05/31/12		F/E	3510/3520
Mercury Digestion	Completed			06/01/12		X/X	SW7470/245.1
Extraction for Herbicide	Completed			06/01/12		D	SW8151
PCB Extraction	Completed			05/31/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			05/31/12		L/L	SW3510
Semi-Volatile Extraction	Completed			05/31/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.4	ug/L	06/04/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	1.4	ug/L	06/04/12		JRB	SW8151
2,4-D	ND	1.4	ug/L	06/04/12		JRB	SW8151
2,4-DB	ND	14	ug/L	06/04/12		JRB	SW8151
Dalapon	ND	1.4	ug/L	06/04/12		JRB	SW8151
Dicamba	ND	2.7	ug/L	06/04/12		JRB	SW8151
Dichloroprop	ND	1.4	ug/L	06/04/12		JRB	SW8151
Dinoseb	ND	2.7	ug/L	06/04/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	06/04/12		JRB	30 - 150 %

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-3

Phoenix I.D.: BB91866

Parameter	Result	RL	Units	Date	Time	By	Reference
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	06/01/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	06/01/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	101		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	06/01/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	06/01/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	59		%	06/01/12		MH	30 - 150 %
% TCMX	67		%	06/01/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	06/04/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	06/04/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	06/04/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	06/04/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	06/04/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	06/04/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	06/04/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	06/04/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	06/04/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	06/04/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	06/04/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	06/04/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	06/04/12		KCA	SW8081
Endrin	ND	0.1	ug/L	06/04/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	06/04/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	06/04/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	06/04/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	06/04/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	06/04/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	06/04/12		KCA	SW8081
Toxaphene	ND	1.0	ug/L	06/04/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	85		%	06/04/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	80		%	06/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/31/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-3

Phoenix I.D.: BB91866

Parameter	Result	RL	Units	Date	Time	By	Reference
1,1,2-Trichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/31/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/31/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/31/12		R/T	SW8260
Acetone	ND	25	ug/L	05/31/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/31/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/31/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/31/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/31/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/31/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/31/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/31/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/31/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/31/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-3

Phoenix I.D.: BB91866

Parameter	Result	RL	Units	Date	Time	By	Reference
n-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/31/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/31/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/31/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/31/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/31/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/31/12		R/T	70 - 130 %
% Bromofluorobenzene	103		%	05/31/12		R/T	70 - 130 %
% Dibromofluoromethane	88		%	05/31/12		R/T	70 - 130 %
% Toluene-d8	103		%	05/31/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	06/05/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	06/05/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	06/05/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	06/05/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	06/05/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	06/05/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	06/05/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	06/05/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	06/05/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	06/05/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	06/05/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	06/05/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	06/05/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	06/05/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	50	ug/L	06/05/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	06/05/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	06/05/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	06/05/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	06/05/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	06/05/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	06/05/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	06/05/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-3

Phoenix I.D.: BB91866

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Nitrophenol	ND	50	ug/L	06/05/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	06/05/12		DD	SW8270
Aniline	ND	10	ug/L	06/05/12		DD	SW8270
Anthracene	ND	5.0	ug/L	06/05/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
Benzidine	ND	50	ug/L	06/05/12		DD	SW8270
Benzoic acid	ND	50	ug/L	06/05/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	06/05/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	06/05/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	06/05/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	06/05/12		DD	SW8270
Carbazole	ND	5.0	ug/L	06/05/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	06/05/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	06/05/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	06/05/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	06/05/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	06/05/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	06/05/12		DD	SW8270
Fluorene	ND	5.0	ug/L	06/05/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	06/05/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	06/05/12		DD	SW8270
Isophorone	ND	5.0	ug/L	06/05/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	06/05/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	06/05/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	06/05/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	06/05/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	06/05/12		DD	SW8270
Phenol	ND	10	ug/L	06/05/12		DD	SW8270
Pyrene	ND	5.0	ug/L	06/05/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	97		%	06/05/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/05/12		DD	15 - 130 %
% 2-Fluorophenol	87		%	06/05/12		DD	15 - 130 %
% Nitrobenzene-d5	90		%	06/05/12		DD	15 - 130 %
% Phenol-d5	80		%	06/05/12		DD	15 - 130 %
% Terphenyl-d14	102		%	06/05/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	06/01/12		KCA	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	06/01/12		KCA	SW8270 (SIM)
Benzo(a)pyrene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	06/01/12		KCA	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	06/01/12		KCA	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	06/01/12		KCA	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	06/01/12		KCA	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	06/01/12		KCA	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: FB-3

Phoenix I.D.: BB91866

Parameter	Result	RL	Units	Date	Time	By	Reference
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	06/01/12		KCA	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	06/01/12		KCA	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	06/01/12		KCA	SW8270 (SIM)
Pyridine	ND	0.50	ug/L	06/01/12		KCA	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	97		%	06/01/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/01/12		KCA	15 - 130 %
% 2-Fluorophenol	87		%	06/01/12		KCA	15 - 130 %
% Nitrobenzene-d5	90		%	06/01/12		KCA	15 - 130 %
% Phenol-d5	80		%	06/01/12		KCA	15 - 130 %
% Terphenyl-d14	102		%	06/01/12		KCA	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 08, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/30/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/31/12	13:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91848
Phoenix ID: BB91867

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-16 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/31/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/31/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/31/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/31/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/31/12		R/T	SW8260
Acetone	ND	25	ug/L	05/31/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-16 1-3 FT

Phoenix I.D.: BB91867

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	05/31/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/31/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/31/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/31/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/31/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/31/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/31/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/31/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/31/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/31/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/31/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/31/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/31/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/31/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/31/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/31/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/31/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/31/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/31/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/31/12		R/T	70 - 130 %
% Bromofluorobenzene	102		%	05/31/12		R/T	70 - 130 %
% Dibromofluoromethane	90		%	05/31/12		R/T	70 - 130 %
% Toluene-d8	102		%	05/31/12		R/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Phoenix I.D.: BB91867

Client ID: GP-16 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 08, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 08, 2012

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201777, QC Sample No: BB87384 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860)													
ICP Metals - Soil													
Arsenic	BDL	2.90	2.79	NC	87.5	88.8	1.5	97.3	96.7	0.6	75 - 125	30	
Barium	BDL	20.6	18.9	8.60	91.5	92.6	1.2	97.7	96.3	1.4	75 - 125	30	
Cadmium	BDL	<0.42	<0.37	NC	88.3	88.2	0.1	97.0	96.5	0.5	75 - 125	30	
Chromium	BDL	17.9	19.5	8.60	92.6	94.0	1.5	99.0	97.5	1.5	75 - 125	30	
Lead	BDL	39.2	20.7	61.8	85.6	87.7	2.4	88.5	86.9	1.8	75 - 125	30	r
Selenium	BDL	<1.7	<1.5	NC	98.5	96.7	1.8	95.5	94.8	0.7	75 - 125	30	
Silver	BDL	<0.42	<0.37	NC	87.8	94.9	7.8	101	100	1.0	75 - 125	30	
QA/QC Batch 201811, QC Sample No: BB91409 (BB91848, BB91849, BB91850)													
Mercury - Soil	BDL	0.83	0.39	72.1	111	108	2.7	NR	NR	NC	70 - 130	30	r
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201810, QC Sample No: BB91818 (BB91866)													
Mercury - Water	BDL	0.0004	0.0002	NC	93.9	89.8	4.5	90.9	86.1	5.4	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201816, QC Sample No: BB91848 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	<0.004	<0.004	NC	98.5	98.6	0.1	97.2	97.3	0.1	75 - 125	20	
Barium	BDL	0.185	0.186	0.50	101	102	1.0	102	101	1.0	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	99.9	101	1.1	98.8	99.3	0.5	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	96.6	97.3	0.7	95.6	95.9	0.3	75 - 125	20	
Lead	BDL	<0.010	<0.010	NC	97.3	95.9	1.4	95.3	96.8	1.6	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	105	105	0.0	103	103	0.0	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	98.4	98.5	0.1	97.5	98.1	0.6	75 - 125	20	
QA/QC Batch 201812, QC Sample No: BB91851 (BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)													
Mercury - Soil	BDL	0.19	0.13	NC	102	95.3	6.8	95.6	113	16.7	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201778, QC Sample No: BB91864 (BB91861, BB91862, BB91863, BB91864, BB91865)													
ICP Metals - Soil													
Arsenic	BDL	15.1	15.0	0.70	88.0	90.4	2.7	97.3	99.1	1.8	75 - 125	30	
Barium	BDL	81.5	78.7	3.50	90.2	96.1	6.3	103	96.9	6.1	75 - 125	30	
Cadmium	BDL	<0.43	<0.46	NC	87.0	94.7	8.5	95.6	97.5	2.0	75 - 125	30	
Chromium	BDL	12.5	13.6	8.40	92.4	98.9	6.8	98.1	102	3.9	75 - 125	30	
Lead	BDL	287	250	13.8	91.7	93.0	1.4	93.5	92.1	1.5	75 - 125	30	
Selenium	BDL	<1.7	<1.9	NC	98.3	103	4.7	95.9	97.3	1.4	75 - 125	30	
Silver	BDL	<0.43	<0.46	NC	93.0	93.6	0.6	99.4	102	2.6	75 - 125	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 201783, QC Sample No: BB92040 (BB91866)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	0.005	NC	101	99.8	1.2	98.6			75 - 125	20
Barium	BDL	0.181	0.184	1.60	101	98.4	2.6	97.8			75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	101	98.3	2.7	97.2			75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	101	98.1	2.9	97.0			75 - 125	20
Lead	BDL	<0.002	<0.002	NC	98.4	97.3	1.1	95.3			75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	104	103	1.0	100			75 - 125	20
Silver	BDL	<0.002	<0.001	NC	98.4	96.2	2.3	95.2			75 - 125	20
Comment:												
MSD not reported.												
QA/QC Batch 201905, QC Sample No: BB92463 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)												
Mercury - Water	BDL	0.0006	0.0004	NC	101	97.8	3.2	79.0	76.4	3.3	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 201906, QC Sample No: BB92592 (BB91865)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	96.8	97.0	0.2	95.4	95.6	0.2	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 08, 2012

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201500, QC Sample No: BB90474 (BB91866)										
Polychlorinated Biphenyls - Ground Water										
PCB-1016	ND	99	98	1.0				40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	93	96	3.2				40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	
% DCBP (Surrogate Rec)	83	45	74	48.7				30 - 150	20	r
% TCMX (Surrogate Rec)	84	93	96	3.2				30 - 150	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

* The DCBP surrogate in the LCS sample was low. All other components were within control. No bias is suspected.

QA/QC Batch 201715, QC Sample No: BB90671 (BB91866)

Chlorinated Herbicides - Ground Water

2,4,5-T	ND	71	76	6.8				40 - 140	20	
2,4,5-TP (Silvex)	ND	72	76	5.4				40 - 140	20	
2,4-D	ND	82	85	3.6				40 - 140	20	
2,4-DB	ND	30	29	3.4				40 - 140	20	l
Dalapon	ND	55	58	5.3				40 - 140	20	
Dicamba	ND	75	78	3.9				40 - 140	20	
Dichloroprop	ND	83	74	11.5				40 - 140	20	
Dinoseb	ND	57	8.4	148.6				40 - 140	20	l,r
% DCAA (Surrogate Rec)	55	60	57	5.1				30 - 150	20	

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted.

QA/QC Batch 201687, QC Sample No: BB91005 (BB91866)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	83	79	4.9				30 - 130	20	
1,2,4-Trichlorobenzene	ND	69	72	4.3				30 - 130	20	
1,2-Dichlorobenzene	ND	64	71	10.4				30 - 130	20	
1,3-Dichlorobenzene	ND	62	67	7.8				30 - 130	20	
1,4-Dichlorobenzene	ND	66	69	4.4				30 - 130	20	
2,4,5-Trichlorophenol	ND	81	76	6.4				30 - 130	20	
2,4,6-Trichlorophenol	ND	86	82	4.8				30 - 130	20	
2,4-Dichlorophenol	ND	88	83	5.8				30 - 130	20	
2,4-Dimethylphenol	ND	51	45	12.5				30 - 130	20	
2,4-Dinitrophenol	ND	94	80	16.1				30 - 130	20	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	87	81	7.1				30 - 130	20	
2,6-Dinitrotoluene	ND	83	76	8.8				30 - 130	20	
2-Chloronaphthalene	ND	75	77	2.6				30 - 130	20	
2-Chlorophenol	ND	72	70	2.8				30 - 130	20	
2-Methylnaphthalene	ND	80	76	5.1				30 - 130	20	
2-Methylphenol (o-cresol)	ND	75	66	12.8				30 - 130	20	
2-Nitroaniline	ND	149	141	5.5				30 - 130	20	I
2-Nitrophenol	ND	80	74	7.8				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	79	69	13.5				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	>150	>150	NC				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	102	93	9.2				30 - 130	20	
4-Bromophenyl phenyl ether	ND	82	82	0.0				30 - 130	20	
4-Chloro-3-methylphenol	ND	88	80	9.5				30 - 130	20	
4-Chloroaniline	ND	>150	>150	NC				30 - 130	20	I
4-Chlorophenyl phenyl ether	ND	87	84	3.5				30 - 130	20	
4-Nitroaniline	ND	82	77	6.3				30 - 130	20	
4-Nitrophenol	ND	93	85	9.0				30 - 130	20	
Acenaphthene	ND	79	76	3.9				30 - 130	20	
Acenaphthylene	ND	76	73	4.0				30 - 130	20	
Acetophenone	ND	74	72	2.7				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	80	77	3.8				30 - 130	20	
Azobenzene	ND	77	73	5.3				30 - 130	20	
Benz(a)anthracene	ND	80	78	2.5				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	68	68	0.0				30 - 130	20	
Benzo(b)fluoranthene	ND	76	76	0.0				30 - 130	20	
Benzo(ghi)perylene	ND	76	79	3.9				30 - 130	20	
Benzo(k)fluoranthene	ND	67	67	0.0				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	69	66	4.4				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	77	77	0.0				30 - 130	20	
Bis(2-chloroethyl)ether	ND	64	65	1.6				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	63	64	1.6				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	68	67	1.5				30 - 130	20	
Carbazole	ND	90	108	18.2				30 - 130	20	
Chrysene	ND	71	75	5.5				30 - 130	20	
Dibenz(a,h)anthracene	ND	74	76	2.7				30 - 130	20	
Dibenzofuran	ND	82	77	6.3				30 - 130	20	
Diethyl phthalate	ND	86	83	3.6				30 - 130	20	
Dimethylphthalate	ND	86	82	4.8				30 - 130	20	
Di-n-butylphthalate	ND	78	80	2.5				30 - 130	20	
Di-n-octylphthalate	ND	80	85	6.1				30 - 130	20	
Fluoranthene	ND	81	81	0.0				30 - 130	20	
Fluorene	ND	86	80	7.2				30 - 130	20	
Hexachlorobenzene	ND	73	76	4.0				30 - 130	20	
Hexachlorobutadiene	ND	71	81	13.2				30 - 130	20	
Hexachlorocyclopentadiene	ND	75	71	5.5				30 - 130	20	
Hexachloroethane	ND	59	65	9.7				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	77	76	1.3				30 - 130	20	
Isophorone	ND	75	75	0.0				30 - 130	20	
Naphthalene	ND	73	76	4.0				30 - 130	20	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Nitrobenzene	ND	74	71	4.1				30 - 130	20	
N-Nitrosodimethylamine	ND	61	60	1.7				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	74	67	9.9				30 - 130	20	
N-Nitrosodiphenylamine	ND	106	104	1.9				30 - 130	20	
Pentachloronitrobenzene	ND	>150	>150	NC				30 - 130	20	l
Pentachlorophenol	ND	98	92	6.3				30 - 130	20	
Phenanthrene	ND	82	80	2.5				30 - 130	20	
Phenol	ND	77	69	11.0				30 - 130	20	
Pyrene	ND	82	84	2.4				30 - 130	20	
Pyridine	ND	53	35	40.9				30 - 130	20	r
% 2,4,6-Tribromophenol	108	74	74	0.0				15 - 130	20	
% 2-Fluorobiphenyl	78	70	71	1.4				30 - 130	20	
% 2-Fluorophenol	77	63	61	3.2				15 - 130	20	
% Nitrobenzene-d5	88	71	66	7.3				30 - 130	20	
% Phenol-d5	79	69	64	7.5				15 - 130	20	
% Terphenyl-d14	105	76	79	3.9				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201667, QC Sample No: BB91025 (BB91866)

Pesticides - Ground Water

4,4' -DDD	ND	101	118	15.5				40 - 140	20	
4,4' -DDE	ND	128	97	27.6				40 - 140	20	r
4,4' -DDT	ND	>130	104	NC				40 - 140	20	l
a-BHC	ND	103	100	3.0				40 - 140	20	
a-Chlordane	ND	116	91	24.2				40 - 140	20	r
Alachlor	ND	N/A	N/A	NC				40 - 140	20	
Aldrin	ND	98	93	5.2				40 - 140	20	
b-BHC	ND	92	97	5.3				40 - 140	20	
Chlordane	ND	N/A	N/A	NC				40 - 140	20	
d-BHC	ND	110	100	9.5				40 - 140	20	
Dieldrin	ND	119	102	15.4				40 - 140	20	
Endosulfan I	ND	123	84	37.7				40 - 140	20	r
Endosulfan II	ND	115	102	12.0				40 - 140	20	
Endosulfan sulfate	ND	125	106	16.5				40 - 140	20	
Endrin	ND	126	100	23.0				40 - 140	20	r
Endrin aldehyde	ND	>130	100	NC				40 - 140	20	l
Endrin ketone	ND	122	113	7.7				40 - 140	20	
g-BHC	ND	102	99	3.0				40 - 140	20	
g-Chlordane	ND	110	90	20.0				40 - 140	20	
Heptachlor	ND	103	99	4.0				40 - 140	20	
Heptachlor epoxide	ND	109	97	11.7				40 - 140	20	
Methoxychlor	ND	127	110	14.3				40 - 140	20	
Toxaphene	ND	N/A	N/A	NC				40 - 140	20	
% DCBP	128	128	123	4.0				30 - 150	20	
% TCMX	106	108	100	7.7				30 - 150	20	

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201692, QC Sample No: BB91160 (BB91866)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	86	105	19.9				50 - 150	20	
% n-Pentacosane	77	84	102	19.4				50 - 150	20	
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 201972, QC Sample No: BB91269 (BB91866, BB91867)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	90	95	5.4	94	94	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	97	104	7.0	105	101	3.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	122	118	3.3	120	115	4.3	70 - 130	30	
1,1,2-Trichloroethane	ND	105	105	0.0	104	100	3.9	70 - 130	30	
1,1-Dichloroethane	ND	102	109	6.6	110	105	4.7	70 - 130	30	
1,1-Dichloroethene	ND	88	94	6.6	101	96	5.1	70 - 130	30	
1,1-Dichloropropene	ND	109	116	6.2	116	109	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	114	112	1.8	102	101	1.0	70 - 130	30	
1,2,3-Trichloropropane	ND	106	106	0.0	107	107	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	111	111	0.0	105	102	2.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	108	111	2.7	109	103	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	110	108	1.8	102	98	4.0	70 - 130	30	
1,2-Dichlorobenzene	ND	93	93	0.0	93	90	3.3	70 - 130	30	
1,2-Dichloroethane	ND	121	123	1.6	128	121	5.6	70 - 130	30	
1,2-Dichloropropane	ND	108	113	4.5	113	107	5.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	108	105	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	103	100	3.0	70 - 130	30	
1,3-Dichloropropane	ND	125	121	3.3	120	118	1.7	70 - 130	30	
1,4-Dichlorobenzene	ND	77	83	7.5	85	83	2.4	70 - 130	30	
2,2-Dichloropropane	ND	65	68	4.5	54	51	5.7	70 - 130	30	l,m
2-Chlorotoluene	ND	111	111	0.0	111	106	4.6	70 - 130	30	
2-Hexanone	ND	133	127	4.6	124	122	1.6	70 - 130	30	l
2-Isopropyltoluene	ND	99	104	4.9	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	105	107	1.9	109	104	4.7	70 - 130	30	
4-Methyl-2-pentanone	ND	118	113	4.3	109	107	1.9	70 - 130	30	
Acetone	ND	125	111	11.9	124	122	1.6	70 - 130	30	
Acrylonitrile	ND	111	113	1.8	112	101	10.3	70 - 130	30	
Benzene	ND	106	112	5.5	112	105	6.5	70 - 130	30	
Bromobenzene	ND	115	117	1.7	114	108	5.4	70 - 130	30	
Bromochloromethane	ND	96	100	4.1	101	97	4.0	70 - 130	30	
Bromodichloromethane	ND	102	106	3.8	109	103	5.7	70 - 130	30	
Bromoform	ND	76	75	1.3	76	75	1.3	70 - 130	30	
Bromomethane	ND	41	62	40.8	84	87	3.5	70 - 130	30	l,r
Carbon Disulfide	ND	89	96	7.6	98	94	4.2	70 - 130	30	
Carbon tetrachloride	ND	102	107	4.8	113	107	5.5	70 - 130	30	
Chlorobenzene	ND	77	83	7.5	86	83	3.6	70 - 130	30	
Chloroethane	ND	90	101	11.5	115	103	11.0	70 - 130	30	
Chloroform	ND	101	104	2.9	108	103	4.7	70 - 130	30	
Chloromethane	ND	89	95	6.5	116	111	4.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	96	103	7.0	100	97	3.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Dibromochloromethane	ND	116	112	3.5	115	109	5.4	70 - 130	30	
Dibromoethane	ND	105	104	1.0	106	101	4.8	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromomethane	ND	101	108	6.7	112	107	4.6	70 - 130	30	
Dichlorodifluoromethane	ND	67	71	5.8	108	105	2.8	70 - 130	30	l
Ethylbenzene	ND	69	74	7.0	73	71	2.8	70 - 130	30	l
Hexachlorobutadiene	ND	99	104	4.9	91	93	2.2	70 - 130	30	
Isopropylbenzene	ND	105	109	3.7	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	77	81	5.1	81	79	2.5	70 - 130	30	
Methyl ethyl ketone	ND	96	101	5.1	123	124	0.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	110	106	3.7	70 - 130	30	
Methylene chloride	ND	79	83	4.9	85	82	3.6	70 - 130	30	
Naphthalene	ND	127	124	2.4	116	115	0.9	70 - 130	30	
n-Butylbenzene	ND	106	109	2.8	104	101	2.9	70 - 130	30	
n-Propylbenzene	ND	95	98	3.1	99	96	3.1	70 - 130	30	
o-Xylene	ND	78	80	2.5	80	77	3.8	70 - 130	30	
p-Isopropyltoluene	ND	110	115	4.4	106	104	1.9	70 - 130	30	
sec-Butylbenzene	ND	99	103	4.0	103	100	3.0	70 - 130	30	
Styrene	ND	69	71	2.9	68	67	1.5	70 - 130	30	l,m
tert-Butylbenzene	ND	106	109	2.8	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	106	111	4.6	110	106	3.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	117	123	5.0	117	118	0.9	70 - 130	30	
Toluene	ND	97	102	5.0	100	94	6.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	92	99	7.3	102	97	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	95	1.0	94	88	6.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	90	13.5	90	98	8.5	70 - 130	30	
Trichloroethene	ND	96	102	6.1	100	94	6.2	70 - 130	30	
Trichlorofluoromethane	ND	97	107	9.8	111	105	5.6	70 - 130	30	
Trichlorotrifluoroethane	ND	80	89	10.7	86	84	2.4	70 - 130	30	
Vinyl chloride	ND	86	94	8.9	110	105	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	104	101	2.9	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	103	118	117	0.9	117	118	0.9	70 - 130	30	
% Dibromofluoromethane	88	88	89	1.1	88	89	1.1	70 - 130	30	
% Toluene-d8	102	102	103	1.0	102	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201689, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862)

Chlorinated Herbicides - Soil

2,4,5-T	ND	43			39	38	2.6	40 - 140	30	
2,4,5-TP (Silvex)	ND	42			40	40	0.0	40 - 140	30	
2,4-D	ND	48			46	46	0.0	40 - 140	30	
2,4-DB	ND	36			34	34	0.0	40 - 140	30	l
Dalapon	ND	43			44	45	2.2	40 - 140	30	
Dicamba	ND	46			47	46	2.2	40 - 140	30	
Dichloroprop	ND	43			39	41	5.0	40 - 140	30	
Dinoseb	ND	42			43	44	2.3	40 - 140	30	
% DCAA (Surrogate Rec)	70	41			40	41	2.5	30 - 150	30	

QA/QC Batch 201677, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855)

Pesticides - Soil

4,4' -DDD	ND	88	86	2.3	89	79	11.9	40 - 140	30	
4,4' -DDE	ND	74	79	6.5	83	71	15.6	40 - 140	30	
4,4' -DDT	ND	76	77	1.3	79	75	5.2	40 - 140	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
a-BHC	ND	85	85	0.0	90	88	2.2	40 - 140	30	
a-Chlordane	ND	86	85	1.2	89	84	5.8	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	86	85	1.2	91	88	3.4	40 - 140	30	
b-BHC	ND	83	83	0.0	83	81	2.4	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	85	84	1.2	83	82	1.2	40 - 140	30	
Dieldrin	ND	88	88	0.0	93	87	6.7	40 - 140	30	
Endosulfan I	ND	90	93	3.3	102	92	10.3	40 - 140	30	
Endosulfan II	ND	66	66	0.0	88	82	7.1	40 - 140	30	
Endosulfan sulfate	ND	81	73	10.4	91	88	3.4	40 - 140	30	
Endrin	ND	94	93	1.1	96	92	4.3	40 - 140	30	
Endrin aldehyde	ND	63	65	3.1	90	86	4.5	40 - 140	30	
Endrin ketone	ND	89	89	0.0	95	90	5.4	40 - 140	30	
g-BHC	ND	85	84	1.2	89	86	3.4	40 - 140	30	
g-Chlordane	ND	83	81	2.4	84	80	4.9	40 - 140	30	
Heptachlor	ND	87	87	0.0	90	89	1.1	40 - 140	30	
Heptachlor epoxide	ND	85	84	1.2	90	83	8.1	40 - 140	30	
Methoxychlor	ND	80	78	2.5	81	75	7.7	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	85	96	77	22.0	95	70	30.3	30 - 150	30	
% TCMX	87	92	92	0.0	94	91	3.2	30 - 150	30	

QA/QC Batch 201675, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	88			70	87	21.7	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	89			74	94	23.8	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	63	77			61	79	25.7	30 - 150	30	
% TCMX (Surrogate Rec)	49	72			63	79	22.5	30 - 150	30	

QA/QC Batch 201690, QC Sample No: BB91709 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	72	75	4.1	77	78	1.3	30 - 130	30	
1,2,4-Trichlorobenzene	ND	68	70	2.9	73	73	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	70	69	1.4	73	73	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	67	68	1.5	71	71	0.0	30 - 130	30	
1,4-Dichlorobenzene	ND	68	68	0.0	71	71	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	78	79	1.3	83	83	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	74	73	1.4	77	78	1.3	30 - 130	30	
2,4-Dichlorophenol	ND	78	77	1.3	81	80	1.2	30 - 130	30	
2,4-Dimethylphenol	ND	53	53	0.0	61	60	1.7	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	7.4	5.8	24.2	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	78	77	1.3	80	78	2.5	30 - 130	30	
2,6-Dinitrotoluene	ND	78	78	0.0	82	81	1.2	30 - 130	30	
2-Chloronaphthalene	ND	74	73	1.4	76	76	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Chlorophenol	ND	70	71	1.4	75	74	1.3	30 - 130	30	
2-Methylnaphthalene	ND	71	72	1.4	75	75	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	73	71	2.8	76	76	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	142	NC	30 - 130	30	l,m
2-Nitrophenol	ND	71	70	1.4	77	75	2.6	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	74	73	1.4	78	75	3.9	30 - 130	30	
3,3'-Dichlorobenzidine	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	81	80	1.2	84	80	4.9	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	34	33	3.0	67	56	17.9	30 - 130	30	
4-Bromophenyl phenyl ether	ND	77	79	2.6	81	85	4.8	30 - 130	30	
4-Chloro-3-methylphenol	ND	79	79	0.0	83	83	0.0	30 - 130	30	
4-Chloroaniline	ND	88	94	6.6	92	91	1.1	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	77	78	1.3	80	80	0.0	30 - 130	30	
4-Nitroaniline	ND	81	80	1.2	84	80	4.9	30 - 130	30	
4-Nitrophenol	ND	75	72	4.1	76	63	18.7	30 - 130	30	
Acenaphthene	ND	73	73	0.0	77	76	1.3	30 - 130	30	
Acenaphthylene	ND	75	74	1.3	78	77	1.3	30 - 130	30	
Acetophenone	ND	71	69	2.9	73	68	7.1	30 - 130	30	
Aniline	ND	104	105	1.0	110	104	5.6	30 - 130	30	
Anthracene	ND	76	76	0.0	79	79	0.0	30 - 130	30	
Azobenzene	ND	71	71	0.0	73	72	1.4	30 - 130	30	
Benz(a)anthracene	ND	81	82	1.2	84	85	1.2	30 - 130	30	
Benzidine	ND	58	55	5.3	56	35	46.2	30 - 130	30	r
Benzo(a)pyrene	ND	73	73	0.0	76	75	1.3	30 - 130	30	
Benzo(b)fluoranthene	ND	79	80	1.3	83	86	3.6	30 - 130	30	
Benzo(ghi)perylene	ND	82	83	1.2	82	72	13.0	30 - 130	30	
Benzo(k)fluoranthene	ND	74	76	2.7	80	86	7.2	30 - 130	30	
Benzyl butyl phthalate	ND	81	83	2.4	83	106	24.3	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	72	72	0.0	76	76	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	68	67	1.5	70	70	0.0	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	70	65	7.4	70	69	1.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	75	79	5.2	79	102	25.4	30 - 130	30	
Carbazole	ND	110	109	0.9	114	104	9.2	30 - 130	30	
Chrysene	ND	76	75	1.3	78	79	1.3	30 - 130	30	
Dibenz(a,h)anthracene	ND	83	84	1.2	84	75	11.3	30 - 130	30	
Dibenzofuran	ND	74	74	0.0	77	76	1.3	30 - 130	30	
Diethyl phthalate	ND	77	79	2.6	80	81	1.2	30 - 130	30	
Dimethylphthalate	ND	77	78	1.3	80	80	0.0	30 - 130	30	
Di-n-butylphthalate	ND	73	75	2.7	77	82	6.3	30 - 130	30	
Di-n-octylphthalate	ND	80	83	3.7	84	99	16.4	30 - 130	30	
Fluoranthene	ND	75	75	0.0	79	76	3.9	30 - 130	30	
Fluorene	ND	76	75	1.3	78	77	1.3	30 - 130	30	
Hexachlorobenzene	ND	74	76	2.7	77	82	6.3	30 - 130	30	
Hexachlorobutadiene	ND	72	74	2.7	76	78	2.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	73	70	4.2	73	70	4.2	30 - 130	30	
Hexachloroethane	ND	68	68	0.0	71	71	0.0	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	83	84	1.2	84	74	12.7	30 - 130	30	
Isophorone	ND	73	73	0.0	76	73	4.0	30 - 130	30	
Naphthalene	ND	69	68	1.5	73	70	4.2	30 - 130	30	
Nitrobenzene	ND	72	71	1.4	74	73	1.4	30 - 130	30	
N-Nitrosodimethylamine	ND	60	49	20.2	62	56	10.2	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	72	66	8.7	72	68	5.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	94	94	0.0	97	95	2.1	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	37	36	2.7	67	66	1.5	30 - 130	30	
Phenanthrene	ND	76	76	0.0	80	79	1.3	30 - 130	30	
Phenol	ND	72	64	11.8	71	56	23.6	30 - 130	30	
Pyrene	ND	77	77	0.0	80	76	5.1	30 - 130	30	
Pyridine	ND	62	44	34.0	63	65	3.1	30 - 130	30	r
% 2,4,6-Tribromophenol	74	73	72	1.4	73	76	4.0	15 - 130	30	
% 2-Fluorobiphenyl	66	72	72	0.0	72	74	2.7	30 - 130	30	
% 2-Fluorophenol	68	68	68	0.0	73	71	2.8	15 - 130	30	
% Nitrobenzene-d5	70	72	71	1.4	74	73	1.4	30 - 130	30	
% Phenol-d5	68	71	69	2.9	73	50	37.4	15 - 130	30	r
% Terphenyl-d14	77	79	80	1.3	81	77	5.1	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201767, QC Sample No: BB91843 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	70			96	68	34.1	50 - 150	30	r
% n-Pentacosane	64	83			102	82	21.7	50 - 150	30	

QA/QC Batch 202022, QC Sample No: BB91855 (BB91855, BB91856, BB91857, BB91858, BB91859)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	102	106	3.8	52	54	3.8	70 - 130	30	m
1,1,1-Trichloroethane	ND	95	112	16.4	69	97	33.7	70 - 130	30	m,r
1,1,2,2-Tetrachloroethane	ND	104	109	4.7	96	98	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	102	103	1.0	88	90	2.2	70 - 130	30	
1,1-Dichloroethane	ND	95	122	24.9	84	111	27.7	70 - 130	30	
1,1-Dichloroethene	ND	112	110	1.8	117	110	6.2	70 - 130	30	
1,1-Dichloropropene	ND	91	89	2.2	86	127	38.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	107	116	8.1	97	101	4.0	70 - 130	30	
1,2,3-Trichloropropane	ND	119	127	6.5	105	110	4.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	110	113	2.7	98	100	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	117	119	1.7	110	112	1.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	106	113	6.4	57	63	10.0	70 - 130	30	m
1,2-Dichlorobenzene	ND	105	104	1.0	100	100	0.0	70 - 130	30	
1,2-Dichloroethane	ND	96	97	1.0	87	88	1.1	70 - 130	30	
1,2-Dichloropropane	ND	101	103	2.0	94	93	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	115	117	1.7	111	111	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	111	110	0.9	102	100	2.0	70 - 130	30	
1,3-Dichloropropane	ND	103	106	2.9	94	98	4.2	70 - 130	30	
1,4-Dichlorobenzene	ND	113	111	1.8	105	103	1.9	70 - 130	30	
2,2-Dichloropropane	ND	100	121	19.0	60	90	40.0	70 - 130	30	m,r
2-Chlorotoluene	ND	103	102	1.0	104	99	4.9	70 - 130	30	
2-Hexanone	ND	75	82	8.9	47	48	2.1	70 - 130	30	m
2-Isopropyltoluene	ND	121	118	2.5	122	121	0.8	70 - 130	30	
4-Chlorotoluene	ND	117	113	3.5	111	109	1.8	70 - 130	30	
4-Methyl-2-pentanone	ND	88	92	4.4	83	84	1.2	70 - 130	30	
Acetone	ND	93	100	7.3	<40	41	NC	70 - 130	30	m
Acrylonitrile	ND	89	121	30.5	85	119	33.3	70 - 130	30	r
Benzene	ND	103	104	1.0	97	99	2.0	70 - 130	30	
Bromobenzene	ND	103	104	1.0	102	97	5.0	70 - 130	30	
Bromochloromethane	ND	85	120	34.1	78	113	36.6	70 - 130	30	r

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromodichloromethane	ND	103	102	1.0	69	68	1.5	70 - 130	30	m
Bromoform	ND	>150	>150	NC	69	73	5.6	70 - 130	30	l,m
Bromomethane	ND	133	120	10.3	98	80	20.2	70 - 130	30	l
Carbon Disulfide	ND	113	110	2.7	124	116	6.7	70 - 130	30	
Carbon tetrachloride	ND	99	117	16.7	43	70	47.8	70 - 130	30	m,r
Chlorobenzene	ND	106	106	0.0	103	103	0.0	70 - 130	30	
Chloroethane	ND	122	116	5.0	<40	<40	NC	70 - 130	30	m
Chloroform	ND	92	118	24.8	82	108	27.4	70 - 130	30	
Chloromethane	ND	102	105	2.9	94	105	11.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	125	32.6	81	116	35.5	70 - 130	30	r
cis-1,3-Dichloropropene	ND	100	101	1.0	70	71	1.4	70 - 130	30	
Dibromochloromethane	ND	109	113	3.6	52	52	0.0	70 - 130	30	m
Dibromoethane	ND	98	100	2.0	85	85	0.0	70 - 130	30	
Dibromomethane	ND	99	101	2.0	90	91	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	116	98	16.8	127	114	10.8	70 - 130	30	
Ethylbenzene	ND	110	108	1.8	105	102	2.9	70 - 130	30	
Hexachlorobutadiene	ND	108	106	1.9	105	104	1.0	70 - 130	30	
Isopropylbenzene	ND	123	119	3.3	120	117	2.5	70 - 130	30	
m&p-Xylene	ND	122	118	3.3	111	109	1.8	70 - 130	30	
Methyl ethyl ketone	ND	71	76	6.8	40	54	29.8	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	110	111	0.9	110	115	4.4	70 - 130	30	
Methylene chloride	ND	101	100	1.0	98	97	1.0	70 - 130	30	
Naphthalene	ND	105	122	15.0	98	109	10.6	70 - 130	30	
n-Butylbenzene	ND	123	118	4.1	111	108	2.7	70 - 130	30	
n-Propylbenzene	ND	107	104	2.8	113	107	5.5	70 - 130	30	
o-Xylene	ND	111	110	0.9	106	108	1.9	70 - 130	30	
p-Isopropyltoluene	ND	119	118	0.8	109	106	2.8	70 - 130	30	
sec-Butylbenzene	ND	118	114	3.4	115	111	3.5	70 - 130	30	
Styrene	ND	147	145	1.4	143	144	0.7	70 - 130	30	l,m
tert-Butylbenzene	ND	107	105	1.9	102	102	0.0	70 - 130	30	
Tetrachloroethene	ND	106	106	0.0	99	103	4.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	89	113	23.8	85	110	25.6	70 - 130	30	
Toluene	ND	104	103	1.0	99	96	3.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	113	112	0.9	109	107	1.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	101	103	2.0	61	63	3.2	70 - 130	30	m
trans-1,4-dichloro-2-butene	ND	118	122	3.3	<40	43	NC	70 - 130	30	m
Trichloroethene	ND	101	99	2.0	94	93	1.1	70 - 130	30	
Trichlorofluoromethane	ND	126	121	4.0	97	82	16.8	70 - 130	30	
Trichlorotrifluoroethane	ND	119	114	4.3	128	120	6.5	70 - 130	30	
Vinyl chloride	ND	119	111	7.0	105	98	6.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	95	97	2.1	96	100	4.1	70 - 130	30	
% Bromofluorobenzene	88	94	90	4.3	90	88	2.2	70 - 130	30	
% Dibromofluoromethane	122	81	125	42.7	80	123	42.4	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	100	99	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 202097, QC Sample No: BB91862 (BB91860, BB91862)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	99	105	5.9	86	91	5.6	70 - 130	30	
1,1,1-Trichloroethane	ND	115	86	28.9	107	83	25.3	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	103	97	6.0	96	94	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	108	110	1.8	104	107	2.8	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethane	ND	113	85	28.3	110	82	29.2	70 - 130	30	
1,1-Dichloroethene	ND	98	103	5.0	95	94	1.1	70 - 130	30	
1,1-Dichloropropene	ND	128	91	33.8	87	86	1.2	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	112	104	7.4	104	100	3.9	70 - 130	30	
1,2,3-Trichloropropane	ND	124	118	5.0	121	116	4.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	103	101	2.0	95	91	4.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	121	121	0.0	117	113	3.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	135	127	6.1	112	121	7.7	70 - 130	30	l
1,2-Dichlorobenzene	ND	95	94	1.1	91	91	0.0	70 - 130	30	
1,2-Dichloroethane	ND	104	105	1.0	101	100	1.0	70 - 130	30	
1,2-Dichloropropane	ND	105	112	6.5	104	105	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	115	113	1.8	113	107	5.5	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	96	95	1.0	70 - 130	30	
1,3-Dichloropropane	ND	104	107	2.8	105	103	1.9	70 - 130	30	
1,4-Dichlorobenzene	ND	100	102	2.0	94	93	1.1	70 - 130	30	
2,2-Dichloropropane	ND	118	87	30.2	108	81	28.6	70 - 130	30	
2-Chlorotoluene	ND	97	100	3.0	97	97	0.0	70 - 130	30	
2-Hexanone	ND	91	92	1.1	71	64	10.4	70 - 130	30	m
2-Isopropyltoluene	ND	112	116	3.5	111	108	2.7	70 - 130	30	
4-Chlorotoluene	ND	112	113	0.9	104	105	1.0	70 - 130	30	
4-Methyl-2-pentanone	ND	100	96	4.1	87	85	2.3	70 - 130	30	
Acetone	ND	92	85	7.9	78	65	18.2	70 - 130	30	m
Acrylonitrile	ND	110	70	44.4	99	67	38.6	70 - 130	30	m,r
Benzene	ND	103	107	3.8	101	102	1.0	70 - 130	30	
Bromobenzene	ND	99	102	3.0	99	104	4.9	70 - 130	30	
Bromochloromethane	ND	117	75	43.8	111	77	36.2	70 - 130	30	r
Bromodichloromethane	ND	108	115	6.3	97	106	8.9	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	96	103	7.0	87	93	6.7	70 - 130	30	
Carbon Disulfide	ND	89	92	3.3	84	83	1.2	70 - 130	30	
Carbon tetrachloride	ND	115	87	27.7	96	76	23.3	70 - 130	30	
Chlorobenzene	ND	97	101	4.0	95	95	0.0	70 - 130	30	
Chloroethane	ND	98	104	5.9	91	96	5.3	70 - 130	30	
Chloroform	ND	106	78	30.4	101	77	27.0	70 - 130	30	
Chloromethane	ND	96	91	5.3	97	87	10.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	117	79	38.8	114	78	37.5	70 - 130	30	r
cis-1,3-Dichloropropene	ND	107	113	5.5	99	103	4.0	70 - 130	30	
Dibromochloromethane	ND	114	120	5.1	94	107	12.9	70 - 130	30	
Dibromoethane	ND	110	113	2.7	103	103	0.0	70 - 130	30	
Dibromomethane	ND	104	108	3.8	102	104	1.9	70 - 130	30	
Dichlorodifluoromethane	ND	83	90	8.1	84	89	5.8	70 - 130	30	
Ethylbenzene	ND	96	103	7.0	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	103	104	1.0	105	98	6.9	70 - 130	30	
Isopropylbenzene	ND	115	121	5.1	115	116	0.9	70 - 130	30	
m&p-Xylene	ND	113	119	5.2	108	108	0.0	70 - 130	30	
Methyl ethyl ketone	ND	103	69	39.5	73	56	26.4	70 - 130	30	l,m,r
Methyl t-butyl ether (MTBE)	ND	95	94	1.1	93	91	2.2	70 - 130	30	
Methylene chloride	ND	93	97	4.2	91	89	2.2	70 - 130	30	
Naphthalene	ND	124	113	9.3	124	118	5.0	70 - 130	30	
n-Butylbenzene	ND	115	118	2.6	110	104	5.6	70 - 130	30	
n-Propylbenzene	ND	101	107	5.8	102	101	1.0	70 - 130	30	
o-Xylene	ND	100	102	2.0	96	99	3.1	70 - 130	30	
p-Isopropyltoluene	ND	118	120	1.7	115	112	2.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
sec-Butylbenzene	ND	117	122	4.2	115	114	0.9	70 - 130	30	
Styrene	ND	148	>150	NC	134	138	2.9	70 - 130	30	l,m
tert-Butylbenzene	ND	109	114	4.5	110	110	0.0	70 - 130	30	
Tetrachloroethene	ND	101	102	1.0	102	97	5.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	104	72	36.4	95	73	26.2	70 - 130	30	r
Toluene	ND	100	107	6.8	99	99	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	100	104	3.9	96	94	2.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	112	116	3.5	96	102	6.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	123	117	5.0	91	104	13.3	70 - 130	30	
Trichloroethene	ND	104	112	7.4	108	106	1.9	70 - 130	30	
Trichlorofluoromethane	ND	104	106	1.9	97	96	1.0	70 - 130	30	
Trichlorotrifluoroethane	ND	89	91	2.2	86	82	4.8	70 - 130	30	
Vinyl chloride	ND	95	100	5.1	92	93	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	95	92	90	2.2	92	92	0.0	70 - 130	30	
% Bromofluorobenzene	95	92	94	2.2	91	94	3.2	70 - 130	30	
% Dibromofluoromethane	113	114	71	46.5	111	71	44.0	70 - 130	30	r
% Toluene-d8	98	98	102	4.0	98	100	2.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201770, QC Sample No: BB92069 (BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

Pesticides - Soil

4,4' -DDD	ND	63	100	45.4	126	127	0.8	40 - 140	30	r
4,4' -DDE	ND	88	75	16.0	>130	>130	NC	40 - 140	30	m
4,4' -DDT	ND	75	96	24.6	>130	>130	NC	40 - 140	30	m
a-BHC	ND	98	117	17.7	113	118	4.3	40 - 140	30	
a-Chlordane	ND	91	103	12.4	102	104	1.9	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	100	119	17.4	112	111	0.9	40 - 140	30	
b-BHC	ND	91	111	19.8	105	116	10.0	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	88	107	19.5	108	117	8.0	40 - 140	30	
Dieldrin	ND	99	109	9.6	>130	>130	NC	40 - 140	30	m
Endosulfan I	ND	112	111	0.9	112	117	4.4	40 - 140	30	
Endosulfan II	ND	62	79	24.1	94	106	12.0	40 - 140	30	
Endosulfan sulfate	ND	74	83	11.5	102	123	18.7	40 - 140	30	
Endrin	ND	96	113	16.3	>130	>130	NC	40 - 140	30	m
Endrin aldehyde	ND	66	66	0.0	>130	>130	NC	40 - 140	30	m
Endrin ketone	ND	87	101	14.9	110	120	8.7	40 - 140	30	
g-BHC	ND	96	115	18.0	109	117	7.1	40 - 140	30	
g-Chlordane	ND	85	98	14.2	99	99	0.0	40 - 140	30	
Heptachlor	ND	100	119	17.4	112	113	0.9	40 - 140	30	
Heptachlor epoxide	ND	92	110	17.8	106	109	2.8	40 - 140	30	
Methoxychlor	ND	82	92	11.5	112	123	9.4	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	89	83	92	10.3	77	85	9.9	30 - 150	30	
% TCMX	130	112	130	14.9	116	122	5.0	30 - 150	30	

QA/QC Batch 201772, QC Sample No: BB92175 (BB91865)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	74	96	25.9	98			50 - 150	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% n-Pentacosane	52	85	109	24.7	108			50 - 150	30	
QA/QC Batch 201769, QC Sample No: BB92183 (BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	63	62	1.6	71	65	8.8	30 - 130	30	
1,2,4-Trichlorobenzene	ND	65	61	6.3	69	66	4.4	30 - 130	30	
1,2-Dichlorobenzene	ND	74	71	4.1	81	74	9.0	30 - 130	30	
1,3-Dichlorobenzene	ND	74	68	8.5	80	71	11.9	30 - 130	30	
1,4-Dichlorobenzene	ND	73	70	4.2	80	72	10.5	30 - 130	30	
2,4,5-Trichlorophenol	ND	76	80	5.1	85	75	12.5	30 - 130	30	
2,4,6-Trichlorophenol	ND	74	79	6.5	82	73	11.6	30 - 130	30	
2,4-Dichlorophenol	ND	73	73	0.0	82	77	6.3	30 - 130	30	
2,4-Dimethylphenol	ND	51	51	0.0	58	53	9.0	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	73	73	0.0	83	77	7.5	30 - 130	30	
2,6-Dinitrotoluene	ND	77	79	2.6	83	81	2.4	30 - 130	30	
2-Chloronaphthalene	ND	80	80	0.0	91	84	8.0	30 - 130	30	
2-Chlorophenol	ND	83	81	2.4	95	86	9.9	30 - 130	30	
2-Methylnaphthalene	ND	73	74	1.4	80	78	2.5	30 - 130	30	
2-Methylphenol (o-cresol)	ND	81	79	2.5	90	85	5.7	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	53	59	10.7	67	62	7.8	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	88	86	2.3	98	90	8.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	117	111	5.3	118	108	8.8	30 - 130	30	
3-Nitroaniline	ND	128	130	1.6	>150	139	NC	30 - 130	30	m
4,6-Dinitro-2-methylphenol	ND	18	50	94.1	24	21	13.3	30 - 130	30	l,m,r
4-Bromophenyl phenyl ether	ND	74	76	2.7	80	78	2.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	82	78	5.0	89	85	4.6	30 - 130	30	
4-Chloroaniline	ND	91	85	6.8	97	92	5.3	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	70	71	1.4	83	75	10.1	30 - 130	30	
4-Nitroaniline	ND	85	88	3.5	98	89	9.6	30 - 130	30	
4-Nitrophenol	ND	64	69	7.5	60	50	18.2	30 - 130	30	
Acenaphthene	ND	83	83	0.0	96	85	12.2	30 - 130	30	
Acenaphthylene	ND	82	83	1.2	92	85	7.9	30 - 130	30	
Acetophenone	ND	77	74	4.0	88	78	12.0	30 - 130	30	
Aniline	ND	116	109	6.2	118	106	10.7	30 - 130	30	
Anthracene	ND	80	82	2.5	93	87	6.7	30 - 130	30	
Azobenzene	ND	98	97	1.0	111	102	8.5	30 - 130	30	
Benz(a)anthracene	ND	78	78	0.0	86	84	2.4	30 - 130	30	
Benzidine	ND	66	67	1.5	38	42	10.0	30 - 130	30	
Benzo(a)pyrene	ND	78	74	5.3	87	82	5.9	30 - 130	30	
Benzo(b)fluoranthene	ND	88	85	3.5	92	97	5.3	30 - 130	30	
Benzo(ghi)perylene	ND	75	74	1.3	87	79	9.6	30 - 130	30	
Benzo(k)fluoranthene	ND	80	79	1.3	95	81	15.9	30 - 130	30	
Benzyl butyl phthalate	ND	87	87	0.0	99	98	1.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	90	87	3.4	99	93	6.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	91	87	4.5	104	90	14.4	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	99	93	6.3	111	99	11.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	91	92	1.1	107	101	5.8	30 - 130	30	
Carbazole	ND	106	111	4.6	120	116	3.4	30 - 130	30	
Chrysene	ND	76	75	1.3	88	80	9.5	30 - 130	30	
Dibenz(a,h)anthracene	ND	74	74	0.0	87	81	7.1	30 - 130	30	
Dibenzofuran	ND	77	79	2.6	89	82	8.2	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Diethyl phthalate	ND	81	80	1.2	91	83	9.2	30 - 130	30	
Dimethylphthalate	ND	78	79	1.3	89	83	7.0	30 - 130	30	
Di-n-butylphthalate	ND	86	89	3.4	98	92	6.3	30 - 130	30	
Di-n-octylphthalate	ND	87	87	0.0	100	93	7.3	30 - 130	30	
Fluoranthene	ND	78	81	3.8	89	89	0.0	30 - 130	30	
Fluorene	ND	80	80	0.0	91	82	10.4	30 - 130	30	
Hexachlorobenzene	ND	96	98	2.1	108	104	3.8	30 - 130	30	
Hexachlorobutadiene	ND	60	58	3.4	64	61	4.8	30 - 130	30	
Hexachlorocyclopentadiene	ND	69	73	5.6	84	77	8.7	30 - 130	30	
Hexachloroethane	ND	77	73	5.3	85	77	9.9	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	74	74	0.0	87	82	5.9	30 - 130	30	
Isophorone	ND	84	81	3.6	90	86	4.5	30 - 130	30	
Naphthalene	ND	81	79	2.5	88	80	9.5	30 - 130	30	
Nitrobenzene	ND	79	76	3.9	88	81	8.3	30 - 130	30	
N-Nitrosodimethylamine	ND	90	80	11.8	99	88	11.8	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	82	79	3.7	90	85	5.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	88	85	3.5	93	88	5.5	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	42	51	19.4	67	41	48.1	30 - 130	30	r
Phenanthrene	ND	82	83	1.2	91	90	1.1	30 - 130	30	
Phenol	ND	88	85	3.5	99	91	8.4	30 - 130	30	
Pyrene	ND	83	87	4.7	93	94	1.1	30 - 130	30	
Pyridine	ND	80	74	7.8	88	76	14.6	30 - 130	30	
% 2,4,6-Tribromophenol	75	83	88	5.8	90	85	5.7	15 - 130	30	
% 2-Fluorobiphenyl	67	72	71	1.4	81	76	6.4	30 - 130	30	
% 2-Fluorophenol	87	83	82	1.2	94	85	10.1	15 - 130	30	
% Nitrobenzene-d5	80	78	75	3.9	89	81	9.4	30 - 130	30	
% Phenol-d5	89	88	84	4.7	98	90	8.5	15 - 130	30	
% Terphenyl-d14	71	79	82	3.7	90	92	2.2	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201951, QC Sample No: BB92297 (BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	95	98	3.1	91	81	11.6	70 - 130	30	
1,1,1-Trichloroethane	ND	119	114	4.3	120	89	29.7	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	102	100	2.0	104	94	10.1	70 - 130	30	
1,1,2-Trichloroethane	ND	103	102	1.0	91	85	6.8	70 - 130	30	
1,1-Dichloroethane	ND	127	120	5.7	125	88	34.7	70 - 130	30	r
1,1-Dichloroethene	ND	114	108	5.4	118	114	3.4	70 - 130	30	
1,1-Dichloropropene	ND	85	85	0.0	82	81	1.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	89	100	11.6	57	41	32.7	70 - 130	30	m,r
1,2,3-Trichloropropane	ND	127	126	0.8	110	115	4.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	79	86	8.5	54	42	25.0	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	107	106	0.9	78	64	19.7	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	93	105	12.1	95	82	14.7	70 - 130	30	
1,2-Dichlorobenzene	ND	95	95	0.0	79	67	16.4	70 - 130	30	m
1,2-Dichloroethane	ND	94	94	0.0	88	84	4.7	70 - 130	30	
1,2-Dichloropropane	ND	101	100	1.0	94	92	2.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	99	81	20.0	70 - 130	30	
1,3-Dichlorobenzene	ND	91	92	1.1	80	67	17.7	70 - 130	30	m
1,3-Dichloropropane	ND	104	105	1.0	98	90	8.5	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,4-Dichlorobenzene	ND	92	92	0.0	80	62	25.4	70 - 130	30	m
2,2-Dichloropropane	ND	111	108	2.7	111	83	28.9	70 - 130	30	
2-Chlorotoluene	ND	97	99	2.0	97	84	14.4	70 - 130	30	
2-Hexanone	ND	45	60	28.6	<40	49	NC	70 - 130	30	l,m
2-Isopropyltoluene	ND	109	108	0.9	98	80	20.2	70 - 130	30	
4-Chlorotoluene	ND	97	98	1.0	91	78	15.4	70 - 130	30	
4-Methyl-2-pentanone	ND	78	85	8.6	63	60	4.9	70 - 130	30	m
Acetone	ND	73	84	14.0	88	78	12.0	70 - 130	30	
Acrylonitrile	ND	133	120	10.3	116	76	41.7	70 - 130	30	l,r
Benzene	ND	102	102	0.0	91	86	5.6	70 - 130	30	
Bromobenzene	ND	102	103	1.0	96	82	15.7	70 - 130	30	
Bromochloromethane	ND	127	119	6.5	115	74	43.4	70 - 130	30	r
Bromodichloromethane	ND	91	92	1.1	88	87	1.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	96	84	13.3	70 - 130	30	l
Bromomethane	ND	132	119	10.4	131	139	5.9	70 - 130	30	l,m
Carbon Disulfide	ND	109	102	6.6	104	99	4.9	70 - 130	30	
Carbon tetrachloride	ND	110	107	2.8	114	89	24.6	70 - 130	30	
Chlorobenzene	ND	100	100	0.0	90	80	11.8	70 - 130	30	
Chloroethane	ND	124	115	7.5	127	130	2.3	70 - 130	30	
Chloroform	ND	123	115	6.7	119	83	35.6	70 - 130	30	r
Chloromethane	ND	107	101	5.8	112	99	12.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	130	125	3.9	118	76	43.3	70 - 130	30	r
cis-1,3-Dichloropropene	ND	89	90	1.1	78	75	3.9	70 - 130	30	
Dibromochloromethane	ND	93	94	1.1	86	83	3.6	70 - 130	30	
Dibromoethane	ND	95	98	3.1	81	76	6.4	70 - 130	30	
Dibromomethane	ND	98	99	1.0	86	82	4.8	70 - 130	30	
Dichlorodifluoromethane	ND	99	85	15.2	103	118	13.6	70 - 130	30	
Ethylbenzene	ND	101	101	0.0	94	86	8.9	70 - 130	30	
Hexachlorobutadiene	ND	91	92	1.1	63	48	27.0	70 - 130	30	m
Isopropylbenzene	ND	115	114	0.9	123	105	15.8	70 - 130	30	
m&p-Xylene	ND	105	105	0.0	88	78	12.0	70 - 130	30	
Methyl ethyl ketone	ND	58	74	24.2	73	56	26.4	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	114	112	1.8	107	101	5.8	70 - 130	30	
Methylene chloride	ND	110	104	5.6	106	101	4.8	70 - 130	30	
Naphthalene	ND	102	116	12.8	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	98	98	0.0	85	64	28.2	70 - 130	30	m
n-Propylbenzene	ND	99	97	2.0	108	90	18.2	70 - 130	30	
o-Xylene	ND	102	103	1.0	88	80	9.5	70 - 130	30	
p-Isopropyltoluene	ND	103	102	1.0	94	75	22.5	70 - 130	30	
sec-Butylbenzene	ND	105	105	0.0	106	87	19.7	70 - 130	30	
Styrene	ND	135	134	0.7	81	70	14.6	70 - 130	30	l
tert-Butylbenzene	ND	104	103	1.0	108	92	16.0	70 - 130	30	
Tetrachloroethene	ND	96	98	2.1	97	86	12.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	121	110	9.5	111	78	34.9	70 - 130	30	r
Toluene	ND	100	99	1.0	89	83	7.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	115	107	7.2	108	105	2.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	88	90	2.2	74	69	7.0	70 - 130	30	m
trans-1,4-dichloro-2-butene	ND	92	95	3.2	79	74	6.5	70 - 130	30	
Trichloroethene	ND	100	102	2.0	97	92	5.3	70 - 130	30	
Trichlorofluoromethane	ND	130	120	8.0	127	124	2.4	70 - 130	30	
Trichlorotrifluoroethane	ND	121	109	10.4	119	117	1.7	70 - 130	30	
Vinyl chloride	ND	116	110	5.3	119	118	0.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	102	101	1.0	100	99	1.0	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Bromofluorobenzene	91	90	89	1.1	84	87	3.5	70 - 130	30	
% Dibromofluoromethane	122	129	126	2.4	130	82	45.3	70 - 130	30	r
% Toluene-d8	99	101	100	1.0	99	102	3.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201802, QC Sample No: BB92322 (BB91863, BB91864, BB91865)

Chlorinated Herbicides - Soil

2,4,5-T	ND	63	63	0.0	108	119	9.7	40 - 140	30	
2,4,5-TP (Silvex)	ND	72	73	1.4	73	73	0.0	40 - 140	30	
2,4-D	ND	79	79	0.0	90	97	7.5	40 - 140	30	
2,4-DB	ND	68	67	1.5	76	88	14.6	40 - 140	30	
Dalapon	ND	66	65	1.5	78	81	3.8	40 - 140	30	
Dicamba	ND	76	78	2.6	72	75	4.1	40 - 140	30	
Dichloroprop	ND	70	71	1.4	75	78	3.9	40 - 140	30	
Dinoseb	ND	75	75	0.0	66	80	19.2	40 - 140	30	
% DCAA (Surrogate Rec)	59	65	64	1.6	73	75	2.7	30 - 150	30	

QA/QC Batch 201958, QC Sample No: BB92322 (BB91864, BB91865)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	106	102	3.8	106	105	0.9	70 - 130	30	
1,1,1-Trichloroethane	ND	96	96	0.0	98	98	0.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	90	1.1	99	97	2.0	70 - 130	30	
1,1,2-Trichloroethane	ND	100	101	1.0	98	96	2.1	70 - 130	30	
1,1-Dichloroethane	ND	93	109	15.8	96	97	1.0	70 - 130	30	
1,1-Dichloroethene	ND	93	92	1.1	101	101	0.0	70 - 130	30	
1,1-Dichloropropene	ND	91	89	2.2	100	99	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	82	88	7.1	96	112	15.4	70 - 130	30	
1,2,3-Trichloropropane	ND	113	108	4.5	106	87	19.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	73	76	4.0	96	110	13.6	70 - 130	30	
1,2,4-Trimethylbenzene	ND	91	86	5.6	103	104	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	112	119	6.1	99	105	5.9	70 - 130	30	
1,2-Dichlorobenzene	ND	89	87	2.3	101	103	2.0	70 - 130	30	
1,2-Dichloroethane	ND	95	97	2.1	97	95	2.1	70 - 130	30	
1,2-Dichloropropane	ND	96	96	0.0	98	98	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	94	89	5.5	104	104	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	86	84	2.4	104	104	0.0	70 - 130	30	
1,3-Dichloropropane	ND	99	99	0.0	100	99	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	83	81	2.4	102	103	1.0	70 - 130	30	
2,2-Dichloropropane	ND	89	89	0.0	94	94	0.0	70 - 130	30	
2-Chlorotoluene	ND	92	88	4.4	103	103	0.0	70 - 130	30	
2-Hexanone	ND	91	90	1.1	53	51	3.8	70 - 130	30	m
2-Isopropyltoluene	ND	97	94	3.1	105	107	1.9	70 - 130	30	
4-Chlorotoluene	ND	85	81	4.8	103	103	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	96	99	3.1	85	83	2.4	70 - 130	30	
Acetone	ND	81	84	3.6	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	101	112	10.3	95	93	2.1	70 - 130	30	
Benzene	ND	95	95	0.0	99	99	0.0	70 - 130	30	
Bromobenzene	ND	97	93	4.2	103	102	1.0	70 - 130	30	
Bromochloromethane	ND	91	90	1.1	94	95	1.1	70 - 130	30	
Bromodichloromethane	ND	98	98	0.0	100	99	1.0	70 - 130	30	
Bromoform	ND	117	119	1.7	109	107	1.9	70 - 130	30	
Bromomethane	ND	84	86	2.4	57	67	16.1	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Carbon Disulfide	ND	97	95	2.1	102	101	1.0	70 - 130	30	
Carbon tetrachloride	ND	100	95	5.1	101	99	2.0	70 - 130	30	
Chlorobenzene	ND	91	90	1.1	103	103	0.0	70 - 130	30	
Chloroethane	ND	95	91	4.3	<40	<40	NC	70 - 130	30	m
Chloroform	ND	93	94	1.1	95	96	1.0	70 - 130	30	
Chloromethane	ND	84	84	0.0	92	95	3.2	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	93	3.3	94	98	4.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	90	91	1.1	97	97	0.0	70 - 130	30	
Dibromochloromethane	ND	107	105	1.9	104	102	1.9	70 - 130	30	
Dibromoethane	ND	97	99	2.0	97	95	2.1	70 - 130	30	
Dibromomethane	ND	97	99	2.0	97	97	0.0	70 - 130	30	
Dichlorodifluoromethane	ND	81	79	2.5	92	96	4.3	70 - 130	30	
Ethylbenzene	ND	96	92	4.3	107	106	0.9	70 - 130	30	
Hexachlorobutadiene	ND	85	88	3.5	102	116	12.8	70 - 130	30	
Isopropylbenzene	ND	96	92	4.3	104	103	1.0	70 - 130	30	
m&p-Xylene	ND	92	90	2.2	107	108	0.9	70 - 130	30	
Methyl ethyl ketone	ND	83	85	2.4	44	44	0.0	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	92	118	24.8	87	107	20.6	70 - 130	30	
Methylene chloride	ND	88	92	4.4	81	82	1.2	70 - 130	30	
Naphthalene	ND	91	114	22.4	89	115	25.5	70 - 130	30	
n-Butylbenzene	ND	84	82	2.4	104	107	2.8	70 - 130	30	
n-Propylbenzene	ND	89	85	4.6	106	106	0.0	70 - 130	30	
o-Xylene	ND	96	94	2.1	106	106	0.0	70 - 130	30	
p-Isopropyltoluene	ND	94	90	4.3	107	108	0.9	70 - 130	30	
sec-Butylbenzene	ND	92	88	4.4	101	102	1.0	70 - 130	30	
Styrene	ND	93	94	1.1	106	107	0.9	70 - 130	30	
tert-Butylbenzene	ND	96	93	3.2	105	106	0.9	70 - 130	30	
Tetrachloroethene	ND	94	89	5.5	105	106	0.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	104	2.9	88	87	1.1	70 - 130	30	
Toluene	ND	93	92	1.1	101	101	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	80	102	24.2	88	110	22.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	93	96	3.2	97	97	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	100	106	5.8	95	97	2.1	70 - 130	30	
Trichloroethene	ND	101	99	2.0	98	99	1.0	70 - 130	30	
Trichlorofluoromethane	ND	103	99	4.0	NC	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	103	100	3.0	105	102	2.9	70 - 130	30	
Vinyl chloride	ND	87	89	2.3	88	89	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	103	102	101	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	100	100	100	0.0	103	100	3.0	70 - 130	30	
% Dibromofluoromethane	97	99	99	0.0	93	95	2.1	70 - 130	30	
% Toluene-d8	105	99	100	1.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201949, QC Sample No: BB92323 (BB91848, BB91849)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	103	97	6.0	100	97	3.0	70 - 130	30	
1,1,1-Trichloroethane	ND	94	100	6.2	119	94	23.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	106	107	0.9	105	105	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	101	97	4.0	98	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	92	115	22.2	123	122	0.8	70 - 130	30	
1,1-Dichloroethene	ND	113	107	5.5	117	120	2.5	70 - 130	30	
1,1-Dichloropropene	ND	91	83	9.2	129	92	33.5	70 - 130	30	r

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,3-Trichlorobenzene	ND	110	112	1.8	104	102	1.9	70 - 130	30	
1,2,3-Trichloropropane	ND	123	125	1.6	121	115	5.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	108	105	2.8	103	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	119	111	7.0	117	115	1.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	110	4.7	89	91	2.2	70 - 130	30	
1,2-Dichlorobenzene	ND	106	98	7.8	102	106	3.8	70 - 130	30	
1,2-Dichloroethane	ND	95	91	4.3	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	100	95	5.1	100	99	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	121	113	6.8	115	116	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	109	98	10.6	108	110	1.8	70 - 130	30	
1,3-Dichloropropane	ND	105	101	3.9	104	103	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	108	100	7.7	113	112	0.9	70 - 130	30	
2,2-Dichloropropane	ND	94	112	17.5	115	91	23.3	70 - 130	30	
2-Chlorotoluene	ND	110	99	10.5	103	107	3.8	70 - 130	30	
2-Hexanone	ND	67	78	15.2	49	48	2.1	70 - 130	30	l,m
2-Isopropyltoluene	ND	121	109	10.4	117	118	0.9	70 - 130	30	
4-Chlorotoluene	ND	114	103	10.1	119	117	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	82	87	5.9	84	78	7.4	70 - 130	30	
Acetone	ND	91	97	6.4	44	<40	NC	70 - 130	30	m
Acrylonitrile	ND	83	119	35.6	119	110	7.9	70 - 130	30	r
Benzene	ND	105	97	7.9	104	102	1.9	70 - 130	30	
Bromobenzene	ND	113	103	9.3	101	105	3.9	70 - 130	30	
Bromochloromethane	ND	82	115	33.5	121	84	36.1	70 - 130	30	r
Bromodichloromethane	ND	100	90	10.5	95	93	2.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	130	112	14.9	79	96	19.4	70 - 130	30	
Carbon Disulfide	ND	109	104	4.7	103	105	1.9	70 - 130	30	
Carbon tetrachloride	ND	95	110	14.6	111	90	20.9	70 - 130	30	
Chlorobenzene	ND	108	100	7.7	108	111	2.7	70 - 130	30	
Chloroethane	ND	121	109	10.4	<40	<40	NC	70 - 130	30	m
Chloroform	ND	90	111	20.9	118	91	25.8	70 - 130	30	
Chloromethane	ND	97	98	1.0	109	105	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	122	33.5	125	87	35.8	70 - 130	30	r
cis-1,3-Dichloropropene	ND	96	91	5.3	96	95	1.0	70 - 130	30	
Dibromochloromethane	ND	103	99	4.0	98	94	4.2	70 - 130	30	
Dibromoethane	ND	96	94	2.1	96	93	3.2	70 - 130	30	
Dibromomethane	ND	100	93	7.3	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	82	29.2	117	128	9.0	70 - 130	30	
Ethylbenzene	ND	112	101	10.3	109	113	3.6	70 - 130	30	
Hexachlorobutadiene	ND	112	101	10.3	105	110	4.7	70 - 130	30	
Isopropylbenzene	ND	126	115	9.1	120	128	6.5	70 - 130	30	
m&p-Xylene	ND	117	105	10.8	120	122	1.7	70 - 130	30	
Methyl ethyl ketone	ND	65	74	12.9	57	<40	NC	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	109	105	3.7	109	102	6.6	70 - 130	30	
Methylene chloride	ND	105	99	5.9	111	111	0.0	70 - 130	30	
Naphthalene	ND	105	125	17.4	110	102	7.5	70 - 130	30	
n-Butylbenzene	ND	119	108	9.7	114	118	3.4	70 - 130	30	
n-Propylbenzene	ND	113	103	9.3	108	117	8.0	70 - 130	30	
o-Xylene	ND	108	101	6.7	110	109	0.9	70 - 130	30	
p-Isopropyltoluene	ND	120	108	10.5	112	116	3.5	70 - 130	30	
sec-Butylbenzene	ND	120	108	10.5	117	123	5.0	70 - 130	30	
Styrene	ND	146	130	11.6	144	>150	NC	70 - 130	30	l,m
tert-Butylbenzene	ND	113	103	9.3	105	112	6.5	70 - 130	30	

QA/QC Data

SDG I.D.: GBB91848

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Tetrachloroethene	ND	105	99	5.9	112	125	11.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	111	26.5	109	84	25.9	70 - 130	30	
Toluene	ND	103	96	7.0	103	104	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	107	4.6	116	115	0.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	93	4.2	96	93	3.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	112	0.0	97	95	2.1	70 - 130	30	
Trichloroethene	ND	101	94	7.2	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	123	117	5.0	82	91	10.4	70 - 130	30	
Trichlorotrifluoroethane	ND	116	111	4.4	116	120	3.4	70 - 130	30	
Vinyl chloride	ND	115	106	8.1	101	106	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	98	100	2.0	94	96	2.1	70 - 130	30	
% Bromofluorobenzene	91	92	91	1.1	90	93	3.3	70 - 130	30	
% Dibromofluoromethane	123	83	127	41.9	123	81	41.2	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 08, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91848	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91848	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	42.5	0.75	10	10	mg/Kg
BB91849	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1900	270	1000	1000	ug/Kg
BB91849	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	17.8	0.74	10	10	mg/Kg
BB91849	MAGU-DAS	SPLPHG	SPLP Mercury	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.0009	0.0004	0.0004	0.0004	mg/L
BB91849	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.019	0.010	0.015	0.015	mg/L
BB91849	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.019	0.010	0.013	0.013	mg/L
BB91850	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	4900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2900	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	290	1000	1000	ug/Kg
BB91850	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	17.9	0.87	10	10	mg/Kg
BB91850	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	483	4.3	400	400	mg/Kg
BB91850	MAGU-DAS	SPLP-AS	SPLP Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.005	0.004	0.004	0.004	mg/L
BB91850	MAGU-DAS	SPLPHG	SPLP Mercury	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.0008	0.0004	0.0004	0.0004	mg/L
BB91850	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.103	0.010	0.015	0.015	mg/L
BB91850	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.103	0.010	0.013	0.013	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91851	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2200	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91851	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	25.0	0.85	10	10	mg/Kg
BB91851	MAGU-DAS	SPLP-AS	SPLP Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.007	0.004	0.004	0.004	mg/L
BB91851	MAGU-DAS	SPLPHG	SPLP Mercury	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.0005	0.0004	0.0004	0.0004	mg/L
BB91851	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.089	0.010	0.015	0.015	mg/L
BB91851	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.089	0.010	0.013	0.013	mg/L
BB91852	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3900	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91852	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	10.4	0.73	10	10	mg/Kg
BB91852	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	6180	36	400	400	mg/Kg
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.930	0.010	0.15	0.15	mg/L
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.930	0.010	0.015	0.015	mg/L
BB91852	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.930	0.010	0.013	0.013	mg/L
BB91853	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	490	140	140	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	15000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	13000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	13000	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7900	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	7900	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	340	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91853	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3400	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	340	1000	1000	ug/Kg
BB91853	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	1000	28	500	500	mg/Kg
BB91853	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	76.6	0.99	10	10	mg/Kg
BB91853	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1970	50	400	400	mg/Kg
BB91853	MAGU-DAS	SPLP-AS	SPLP Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.005	0.004	0.004	0.004	mg/L
BB91853	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.071	0.010	0.015	0.015	mg/L
BB91853	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.071	0.010	0.013	0.013	mg/L
BB91854	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3900	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	280	1000	1000	ug/Kg
BB91854	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20.4	0.78	10	10	mg/Kg
BB91854	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.046	0.010	0.015	0.015	mg/L
BB91854	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.046	0.010	0.013	0.013	mg/L
BB91855	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1900	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2600	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2600	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	260	1000	1000	ug/Kg
BB91855	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	25.6	0.80	10	10	mg/Kg
BB91855	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1910	40	400	400	mg/Kg
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.193	0.010	0.15	0.15	mg/L
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.193	0.010	0.015	0.015	mg/L
BB91855	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.193	0.010	0.013	0.013	mg/L
BB91856	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3300	290	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2700	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2700	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91856	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	22.7	0.80	10	10	mg/Kg
BB91856	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1150	4.0	400	400	mg/Kg
BB91856	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.090	0.010	0.015	0.015	mg/L
BB91856	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.090	0.010	0.013	0.013	mg/L
BB91857	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5400	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5600	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5600	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3100	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91857	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	22.8	0.83	10	10	mg/Kg
BB91857	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	424	4.2	400	400	mg/Kg
BB91857	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.071	0.010	0.015	0.015	mg/L
BB91857	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.071	0.010	0.013	0.013	mg/L
BB91858	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2200	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2200	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	280	1000	1000	ug/Kg
BB91858	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20.8	0.88	10	10	mg/Kg
BB91858	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1360	44	400	400	mg/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91858	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.016	0.010	0.015	0.015	mg/L
BB91858	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.016	0.010	0.013	0.013	mg/L
BB91859	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3100	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91859	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	38.2	0.84	10	10	mg/Kg
BB91860	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3300	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	290	1000	1000	ug/Kg
BB91860	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	28.5	0.82	10	10	mg/Kg
BB91860	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.017	0.010	0.015	0.015	mg/L
BB91860	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.017	0.010	0.013	0.013	mg/L
BB91861	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2100	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2100	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3000	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3000	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91861	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	26.4	0.83	10	10	mg/Kg
BB91861	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.017	0.010	0.015	0.015	mg/L
BB91861	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.017	0.010	0.013	0.013	mg/L
BB91862	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4100	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	4100	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5800	270	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91862	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5900	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5900	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3000	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3000	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91862	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	22.7	0.83	10	10	mg/Kg
BB91862	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1300	41	400	400	mg/Kg
BB91862	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.064	0.010	0.015	0.015	mg/L
BB91862	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.064	0.010	0.013	0.013	mg/L
BB91863	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	1200	600	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7400	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	7400	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	10000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	10000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5800	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5800	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2000	280	1000	1000	ug/Kg
BB91863	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	680	24	500	500	mg/Kg
BB91863	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	30	6.0	7	7	ug/Kg
BB91863	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	52.1	0.83	10	10	mg/Kg
BB91863	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1620	42	400	400	mg/Kg
BB91863	MAGU-DAS	SPLP-AS	SPLP Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.009	0.004	0.004	0.004	mg/L
BB91863	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.106	0.010	0.015	0.015	mg/L
BB91863	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.106	0.010	0.013	0.013	mg/L
BB91864	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	430	140	140	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5100	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6300	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6200	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6200	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3800	300	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, GWP, RC, SWP

GBB91848

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91864	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3800	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	300	1000	1000	ug/Kg
BB91864	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	15.1	0.87	10	10	mg/Kg
BB91864	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.065	0.010	0.015	0.015	mg/L
BB91864	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.065	0.010	0.013	0.013	mg/L
BB91865	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	410	140	140	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	290	1000	1000	ug/Kg
BB91865	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	28.7	0.81	10	10	mg/Kg
BB91865	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.021	0.010	0.015	0.015	mg/L
BB91865	MAGU-DAS	SPLP-PB	SPLP Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.021	0.010	0.013	0.013	mg/L
BB91866	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB91866	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB91866	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB91866	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB91867	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB91867	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866, BB91867

Sampling Date(s): 5/30/2012

RCP Methods Used:

☑ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☑ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, PCB Narration, PEST Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Friday, June 08, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
Sample BB91866: Field Blank
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWPC criteria.

8270 Semi-volatile Organics: (Soils)
Pyridine reporting levels do not meet GBPM criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 06/01/12-1 (BB91866)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid1 06/01/12-2 (BB91848, BB91850, BB91860, BB91861, BB91862, BB91864)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid1 06/04/12-1 (BB91863)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

Instrument: Au-fid84 06/01/12-1 (BB91865)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 06/01/12-2 (BB91852, BB91854, BB91855, BB91856)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 06/04/12-1 (BB91853)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

Instrument: Au-xl1 06/01/12-1 (BB91849)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-xl1 06/01/12-2 (BB91851, BB91857, BB91858, BB91859)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01692 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB91160, QA/QC Batch: 201692 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB91843, QA/QC Batch: 201767 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

---------- Sample No: BB92175, QA/QC Batch: 201772 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201715 (Samples: BB91866): -----

The LCS/LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-DB)

The LCS and/or the LCSD recovery is below the method criteria. A low bias is likely. (Dinoseb)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Dinoseb)

QC Batch 201689 (Samples: BB91866): -----

The LCS/LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-DB)

Instrument: Au-ecd14 06/04/12-1 (BB91866)

Initial Calibration ECD14-060412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01715 05/31/12 (BB91866)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Batch Specific)

---------- Sample No: BB90671, QA/QC Batch: 201715 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(30%)

All LCSD recoveries were within 40 - 140 with the following exceptions: 2,4-DB(29%), Dinoseb(8.4%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Dinoseb(148.6%)

---------- Sample No: BB91709, QA/QC Batch: 201689 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(36%)

---------- Sample No: BB92322, QA/QC Batch: 201802 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 6/1/2012

Instrument: Merlin 06/04/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	6/4/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91851, QA/QC Batch: 201812 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91409, QA/QC Batch: 201811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91818, QA/QC Batch: 201810 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB92463, QA/QC Batch: 201905 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB92592, QA/QC Batch: 201906 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 05/31/12-1 (BB91848)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/31/2012

Instrument: Icp9 06/01/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865, BB91866)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/04/12-1 (BB91848, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01783 05/31/12 (BB91866)

MSD not reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91848, QA/QC Batch: 201816 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91864, QA/QC Batch: 201778 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB87384, QA/QC Batch: 201777 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92040, QA/QC Batch: 201783 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201500 (Samples: BB91866): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant bias is suspected.(% DCBP (Surrogate Rec))

Instrument: Au-ecd35 06/01/12-1 (BB91866)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 6/1/2012

Instrument: Au-ecd5 06/02/12-1 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 6/2/2012

Instrument: Au-ecd7 06/01/12-1 (BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01500 05/25/12 (BB91866)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

The DCBP surrogate in the LCS sample was low. All other components were within control. No bias is suspected.

QC (Batch Specific)

---------- Sample No: BB90474, QA/QC Batch: 201500 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % DCBP (Surrogate Rec)(48.7%)

---------- Sample No: BB91709, QA/QC Batch: 201675 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201667 (Samples: BB91866): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (4,4'' -DDT, Endrin aldehyde)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,4'' -DDE, a-Chlordane, Endosulfan I, Endrin)

QC Batch 201770 (Samples: BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,4'' -DDD)

Instrument: Au-ecd13 06/01/12-1 (BB91848, BB91849, BB91859)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Instrument: Au-ecd4 06/03/12-1 (BB91851, BB91852, BB91853, BB91854)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Au-ecd4 06/04/12-1 (BB91860)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/4/2012

QC Comments: QC Batch 01667 05/30/12 (BB91866)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Batch Specific)

---------- Sample No: BB91025, QA/QC Batch: 201667 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 4,4' -DDT(>130%), Endrin aldehyde(>130%)

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Endosulfan I(37.7%)

---------- Sample No: BB91709, QA/QC Batch: 201677 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92069, QA/QC Batch: 201770 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,4' -DDD(45.4%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201687 (Samples: BB91866): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline,Pentachloronitrobenzene)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes. This analyte is not reported. No variability is suspected.(Pyridine)

QC Batch 201690 (Samples: BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Pyridine)

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, Pentachloronitrobenzene)

QC Batch 201769 (Samples: BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (4,6-Dinitro-2-methylphenoll)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,6-Dinitro-2-methylphenol)

The LCS and/orLCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, Pentachloronitrobenzene)

Instrument: Chem09 05/31/12-2 (BB91848, BB91849, BB91850, BB91851, BB91852, BB91853, BB91854, BB91855, BB91856, BB91857, BB91858, BB91859, BB91860, BB91861, BB91862, BB91863, BB91864, BB91865)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

initial calibration: Benzaldehyde, Bis(2-chloroethyl)ether, Bis(2-chloroisopropyl)ether, Caprolactam, 3-Nitroaniline, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 5/31/2012

Instrument: Chem09 06/03/12-1 (BB91864)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Chem09 06/05/12-1 (BB91866)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate

Printed Name Damien Drobinski
Position: Chemist
Date: 6/5/2012

Instrument: Chem12 06/03/12-1 (BB91853, BB91863)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0603):

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 3&4-methylphenol (m&p-cresol), 2-nitrophenol, 2-nitroaniline, 4,6-dinitro-2-methylphenol, Benzyl Butyl Phthalate

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

QC Comments: QC Batch 01687 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Batch Specific)

---------- Sample No: BB91005, QA/QC Batch: 201687 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(149%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(141%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: Pyridine(40.9%)

---------- Sample No: BB91709, QA/QC Batch: 201690 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Pyridine(34.0%)

---------- Sample No: BB92183, QA/QC Batch: 201769 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(18%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(94.1%)

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 06/01/12-1 (BB91866)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0531):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

had RSDs >20% and <0.99 correlation coefficient: 1,2,4,5-Tetrachlorobenzene

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration:

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01687 05/30/12 (BB91866)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201949 (Samples: BB91848, BB91849): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria.Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS and or LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone, Methyl ethyl ketone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

The LCS and/or LCSDrecovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201951 (Samples: BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863): -----

The LCS and/or LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone, Methyl ethyl ketone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Acrylonitrile, Bromoform, Bromomethane , Styrene)

QC Batch 201972 (Samples: BB91866, BB91867): -----

The LCS and/or CSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane, Bromomethane , Styrene, Dichlorodifluoromethane, Ethylbenzene,)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Hexanone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Bromomethane)

QC Batch 202022 (Samples: BB91855, BB91856, BB91857, BB91858, BB91859): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Bromomethane, Bromoform, Styrene)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, 2-

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Hexanone, Acetone, Bromodichloromethane, Bromoform, Carbon tetrachloride, Chloroethane, Dibromochloromethane, Methyl ethyl ketone, trans-1,3-Dichloropropene, trans-1,4-dichloro-2-butene)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

QC Batch 202097 (Samples: BB91860, BB91862): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within range. No bias is suspected. (% Dibromofluoromethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (1,1-Dichloropropene, 2,2-Dichloropropane, Acrylonitrile, Bromochloromethane, Chloroform, cis-1,2-Dichloroethene, Methyl ethyl ketone, Tetrahydrofuran (THF))

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Methyl ethyl ketone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (1,2-Dibromo-3-chloropropane)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (2-Hexanone, Acetone, Acrylonitrile)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

Instrument: Chem03 06/01/12-1 (BB91864, BB91865)

Initial Calibration Verification (RCPS_0531):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Methyl Ethyl Ketone, 2-hexanone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%:

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem08 05/30/12-3 (BB91866, BB91867)

S -Side
Initial Calibration(RCPS_0529:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, Trans-1,4-dichloro-2-butene

Continuing Calibration Verification:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: trans-1,4-Dichloro-2-butene Bromomethane, 2,2-Dichloropropane, Tetrahydrofuran (THF), Styrene

Printed Name Tina Covensky
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 06/01/12-1 (BB91848, BB91849)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem11 06/01/12-2 (BB91850, BB91851, BB91852, BB91853, BB91854, BB91861, BB91863)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Tetrahydrofuran (THF), 2-Hexanone, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

Instrument: Chem11 06/04/12-1 (BB91855, BB91856, BB91857, BB91858, BB91859)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Styrene, Bromoform

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

Printed Name Johanna Harrington
Position: Chemist
Date: 6/4/2012

Instrument: Chem11 06/05/12-2 (BB91860, BB91862)

Initial Calibration Verification (CHEM11/RCPS_0605):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: 1,1-dichloroethane, Acrylonitrile, Cis-1,2-dichloroethene, 2,2-dichloropropane, Tetrahydrofuran (thf), Methyl Ethyl Ketone, Bromochloromethane, 1,1-dichloropropene, 1,1,1,2-tetrachloroethane, Styrene, Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Trans-1,4-dichloro-2-butene, 1,2,4-trimethylbenzene, Sec-butylbenzene, 2-isopropyltoluene, N-butylbenzene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:

Printed Name Johanna Harrington
Position: Chemist
Date: 6/5/2012

QC Comments: QC Batch 01972 06/04/12 (BB91866, BB91867)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 02097 06/06/12 (BB91860, BB91862)

A blank MS/MSD was analyzed with this batch.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

QC (Site Specific)

---------- Sample No: BB91855, QA/QC Batch: 202022 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Bromomethane(133%), Styrene(147%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Styrene(145%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(42.7%), Bromochloromethane(34.1%), cis-1,2-Dichloroethene(32.6%)

All MS recoveries were within 70 - 130 with the following exceptions: 1,1,1,2-Tetrachloroethane(52%), 1,1,1-Trichloroethane(69%), 1,2-Dibromo-3-chloropropane(57%), 2,2-Dichloropropane(60%), 2-Hexanone(47%), Acetone(<40%), Bromodichloromethane(69%), Bromoform(69%), Carbon tetrachloride(43%), Chloroethane(<40%), Dibromochloromethane(52%), Methyl ethyl ketone(40%), Styrene(143%), trans-1,3-Dichloropropene(61%), trans-1,4-dichloro-2-butene(<40%)

All MSD recoveries were within 70 - 130 with the following exceptions: 1,1,1,2-Tetrachloroethane(54%), 1,2-Dibromo-3-chloropropane(63%), 2-Hexanone(48%), Acetone(41%), Bromodichloromethane(68%), Chloroethane(<40%), Dibromochloromethane(52%), Methyl ethyl ketone(54%), Styrene(144%), trans-1,3-Dichloropropene(63%), trans-1,4-dichloro-2-butene(43%)

All MS/MSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(42.4%), 1,1,1-Trichloroethane(33.7%), 1,1-Dichloropropene(38.5%), 2,2-Dichloropropane(40.0%), Acrylonitrile(33.3%), Bromochloromethane(36.6%), Carbon tetrachloride(47.8%), cis-1,2-Dichloroethene(35.5%)

---------- Sample No: BB91862, QA/QC Batch: 202097 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2-Dibromo-3-chloropropane(135%), Bromoform(>150%), Styrene(148%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Methyl ethyl ketone(69%), Styrene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(46.5%), 1,1-Dichloropropene(33.8%), Acrylonitrile(44.4%), Bromochloromethane(43.8%), cis-1,2-Dichloroethene(38.8%), Methyl ethyl ketone(39.5%), Tetrahydrofuran (THF)(36.4%)

All MS recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%), Styrene(134%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(64%), Acetone(65%), Acrylonitrile(67%), Bromoform(>150%), Methyl ethyl ketone(56%), Styrene(138%)

All MS/MSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(44.0%), Acrylonitrile(38.6%), Bromochloromethane(36.2%), cis-1,2-Dichloroethene(37.5%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91269, QA/QC Batch: 201972 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%), 2-Hexanone(133%), Bromomethane(41%), Dichlorodifluoromethane(67%), Ethylbenzene(69%), Styrene(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Bromomethane(62%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 08, 2012

SDG I.D.: GBB91848

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromomethane(40.8%)

---------- Sample No: BB92297, QA/QC Batch: 201951 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(45%), Acrylonitrile(133%), Bromoform(>150%), Bromomethane(132%), Methyl ethyl ketone(58%), Styrene(135%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(60%), Bromoform(>150%), Styrene(134%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92322, QA/QC Batch: 201958 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92323, QA/QC Batch: 201949 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%), Bromoform(>150%), Methyl ethyl ketone(65%), Styrene(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.9%), Acrylonitrile(35.6%), Bromochloromethane(33.5%), cis-1,2-Dichloroethene(33.5%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

o Wilcepail

CHAIN OF CUSTODY RECORD

Temp 6 Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: MetroNorth Railroad Catenary
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: Cindy Yt Date: 5-30-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification		Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals					Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91848	GP-16	1-3'	S	5-30-12	8:07am	X	X	X	X	X	X	X					3	2								
91849	GP-17	1-3'			8:41am																					
91850	GP-18	1-3'			9:18am																					
91851	GP-19	1-3'			9:39am																					
91852	GP-23	2-4'			10:09am													1	1							
91853	GP-24	1-3'			10:43am																					
91854	GP-25	1-3'			11:04am																					
91855	GP-26	1-3'			11:31am																					
91856	GP-27	1-3'			11:56am																					
91857	GP-28	2-4'			12:39pm																					
91858	GP-29	1-3'			1:14pm																					
91859	GP-30	1-3'			1:40pm																					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

010/1 repeat

CHAIN OF CUSTODY RECORD

Temp 6 Pg 2 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-30-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Soil VOA Vials [ ] methanol [2] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91860	GP-31 1-3'	S	5-30-12	1:54pm	X	X	X	X	X	X	X	3	1	1							
91861	GP-32 1-3'	↓	↓	2:06pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91862	GP-33 1-3'	↓	↓	2:19pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91863	GP-34 1-3'	↓	↓	2:38pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91864	GP-35 1-3'	↓	↓	2:49pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91865	GP-36 1-3'	↓	↓	3:00pm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓							
91866	FB-3	GW	↓	4:40pm	↓	↓	↓	↓	↓	↓	↓				3	6			1		
91867	TB-16	GW	↓	–	↓										2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/31/12	10:20
[signature]	[signature]	5/31/12	13:40

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☒ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Wednesday, May 23, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB86389 - BB86397

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	6:34
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86389

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-6 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Arsenic	4.17	0.71	mg/Kg	05/17/12		EK	6010
Barium	50.9	0.36	mg/Kg	05/17/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Chromium	18.4	0.36	mg/Kg	05/17/12		EK	6010
Mercury	0.19	0.08	mg/Kg	05/17/12		RS	SW-7471
Lead	90.3	0.36	mg/Kg	05/17/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.016	0.004	mg/L	05/19/12		LK	6010
SPLP Barium	0.157	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	0.026	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	0.412	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	88		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-6 1-3 FT

Phoenix I.D.: BB86389

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	95	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	95	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	68		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	330	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	126		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	105		%	05/17/12		MH	30 - 150 %
% TCMX	96		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/18/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-6 1-3 FT

Phoenix I.D.: BB86389

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	88		%	05/18/12		KCA	30 - 150 %
% TCMX	102		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-6 1-3 FT

Phoenix I.D.: BB86389

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Toluene	7.3	5.7	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	05/17/12		H/J	70 - 130 %
% Dibromofluoromethane	113		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	99		%	05/17/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	600	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-6 1-3 FT

Phoenix I.D.: BB86389

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	600	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	600	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	600	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	260	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/16/12		DD	SW 8270
Anthracene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	370	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	950	260	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	450	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	1100	260	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	2000	260	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	730	260	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	460	260	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	560	ug/Kg	05/16/12		DD	SW 8270
Chrysene	1200	260	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	260	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	1500	260	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	640	260	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	260	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	260	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-6 1-3 FT

Phoenix I.D.: BB86389

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	700	260	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	260	ug/Kg	05/16/12		DD	SW 8270
Pyrene	1300	260	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	370	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	92		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	84		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	75		%	05/16/12		DD	15 - 130 %
% Phenol-d5	82		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	56		%	05/16/12		DD	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	7:21
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86390

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-82 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	05/17/12		EK	6010
Arsenic	5.40	0.77	mg/Kg	05/17/12		EK	6010
Barium	247	0.39	mg/Kg	05/17/12		EK	6010
Cadmium	0.72	0.39	mg/Kg	05/17/12		EK	6010
Chromium	21.0	0.39	mg/Kg	05/17/12		EK	6010
Mercury	0.23	0.06	mg/Kg	05/17/12		RS	SW-7471
Lead	553	3.9	mg/Kg	05/21/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.018	0.004	mg/L	05/19/12		LK	6010
SPLP Barium	0.270	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	0.053	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	0.0014	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	2.16	0.10	mg/L	05/21/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	90		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-82 1-3 FT

Phoenix I.D.: BB86390

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	70		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	400	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	130		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	105		%	05/17/12		MH	30 - 150 %
% TCMX	104		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	88		%	05/18/12		KCA	30 - 150 %
% TCMX	104		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/18/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/18/12		R/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/18/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/18/12		R/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Benzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Bromoform	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Bromomethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Chloroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Chloroform	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Chloromethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/18/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
m&p-Xylene	6.3	5.6	ug/Kg	05/18/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/18/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/18/12		R/J	SW8260
Methylene chloride	ND	56	ug/Kg	05/18/12		R/J	SW8260
Naphthalene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
o-Xylene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Styrene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/18/12		R/J	SW8260
Toluene	7.4	5.6	ug/Kg	05/18/12		R/J	SW8260
Total Xylenes	6.3	5.6	ug/Kg	05/18/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/18/12		R/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	05/18/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/18/12		R/J	70 - 130 %
% Bromofluorobenzene	81		%	05/18/12		R/J	70 - 130 %
% Dibromofluoromethane	115		%	05/18/12		R/J	70 - 130 %
% Toluene-d8	94		%	05/18/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/18/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/18/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
2-Methylnaphthalene	650	510	ug/Kg	05/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-82 1-3 FT

Phoenix I.D.: BB86390

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/18/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/18/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	730	ug/Kg	05/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/18/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	730	ug/Kg	05/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/18/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/18/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/18/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/18/12		DD	SW 8270
Acenaphthylene	1700	510	ug/Kg	05/18/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/18/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/18/12		DD	SW 8270
Anthracene	1400	510	ug/Kg	05/18/12		DD	SW 8270
Azobenzene	ND	730	ug/Kg	05/18/12		DD	SW 8270
Benz(a)anthracene	5700	510	ug/Kg	05/18/12		DD	SW 8270
Benzidine	ND	870	ug/Kg	05/18/12		DD	SW 8270
Benzo(a)pyrene	6200	510	ug/Kg	05/18/12		DD	SW 8270
Benzo(b)fluoranthene	7600	510	ug/Kg	05/18/12		DD	SW 8270
Benzo(ghi)perylene	2400	510	ug/Kg	05/18/12		DD	SW 8270
Benzo(k)fluoranthene	3400	510	ug/Kg	05/18/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	730	ug/Kg	05/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	4600	510	ug/Kg	05/18/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/18/12		DD	SW 8270
Chrysene	7800	510	ug/Kg	05/18/12		DD	SW 8270
Dibenz(a,h)anthracene	590	510	ug/Kg	05/18/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/18/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/18/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/18/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/18/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/18/12		DD	SW 8270
Fluoranthene	11000	510	ug/Kg	05/18/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/18/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/18/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	2400	510	ug/Kg	05/18/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/18/12		DD	SW 8270
Naphthalene	570	510	ug/Kg	05/18/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	730	ug/Kg	05/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-82 1-3 FT

Phoenix I.D.: BB86390

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	730	ug/Kg	05/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	730	ug/Kg	05/18/12		DD	SW 8270
Pentachlorophenol	ND	730	ug/Kg	05/18/12		DD	SW 8270
Phenanthrene	7700	510	ug/Kg	05/18/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/18/12		DD	SW 8270
Pyrene	9500	510	ug/Kg	05/18/12		DD	SW 8270
Pyridine	ND	730	ug/Kg	05/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	113		%	05/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	87		%	05/18/12		DD	15 - 130 %
% 2-Fluorophenol	92		%	05/18/12		DD	15 - 130 %
% Nitrobenzene-d5	90		%	05/18/12		DD	15 - 130 %
% Phenol-d5	91		%	05/18/12		DD	15 - 130 %
% Terphenyl-d14	71		%	05/18/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	9:45
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86391

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-83 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Arsenic	3.84	0.71	mg/Kg	05/17/12		EK	6010
Barium	53.6	0.36	mg/Kg	05/17/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Chromium	16.2	0.36	mg/Kg	05/17/12		EK	6010
Mercury	0.17	0.09	mg/Kg	05/17/12		RS	SW-7471
Lead	77.1	0.36	mg/Kg	05/17/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.006	0.004	mg/L	05/19/12		LK	6010
SPLP Barium	0.028	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	0.057	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	88		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-83 2-4 FT

Phoenix I.D.: BB86391

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	94	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	94	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	240	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	87		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	107		%	05/17/12		MH	30 - 150 %
% TCMX	103		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	87		%	05/18/12		KCA	30 - 150 %
% TCMX	109		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/17/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	11	5.6	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Toluene	19	5.6	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	11	5.6	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	87		%	05/17/12		H/J	70 - 130 %
% Dibromofluoromethane	110		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	96		%	05/17/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-83 2-4 FT

Phoenix I.D.: BB86391

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	05/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/17/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	740	ug/Kg	05/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Acenaphthylene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Anthracene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Azobenzene	ND	740	ug/Kg	05/17/12		DD	SW 8270
Benz(a)anthracene	1400	510	ug/Kg	05/17/12		DD	SW 8270
Benzidine	ND	880	ug/Kg	05/17/12		DD	SW 8270
Benzo(a)pyrene	1600	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(b)fluoranthene	2700	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(ghi)perylene	750	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(k)fluoranthene	890	510	ug/Kg	05/17/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	740	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/17/12		DD	SW 8270
Chrysene	1600	510	ug/Kg	05/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/17/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Fluoranthene	2100	510	ug/Kg	05/17/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	680	510	ug/Kg	05/17/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	740	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-83 2-4 FT

Phoenix I.D.: BB86391

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	740	ug/Kg	05/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	740	ug/Kg	05/17/12		DD	SW 8270
Pentachlorophenol	ND	740	ug/Kg	05/17/12		DD	SW 8270
Phenanthrene	770	510	ug/Kg	05/17/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
Pyrene	1800	510	ug/Kg	05/17/12		DD	SW 8270
Pyridine	ND	740	ug/Kg	05/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	125		%	05/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	90		%	05/17/12		DD	15 - 130 %
% 2-Fluorophenol	111		%	05/17/12		DD	15 - 130 %
% Nitrobenzene-d5	98		%	05/17/12		DD	15 - 130 %
% Phenol-d5	102		%	05/17/12		DD	15 - 130 %
% Terphenyl-d14	80		%	05/17/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	10:31
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86392

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-84 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	05/17/12		EK	6010
Arsenic	11.3	0.75	mg/Kg	05/17/12		EK	6010
Barium	81.0	0.37	mg/Kg	05/17/12		EK	6010
Cadmium	0.59	0.37	mg/Kg	05/17/12		EK	6010
Chromium	22.2	0.37	mg/Kg	05/17/12		EK	6010
Mercury	0.32	0.09	mg/Kg	05/17/12		RS	SW-7471
Lead	401	3.7	mg/Kg	05/21/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/21/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.012	0.004	mg/L	05/19/12		LK	6010
SPLP Barium	0.187	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	0.021	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	0.710	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	89		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-84 2-4 FT

Phoenix I.D.: BB86392

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	93	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	93	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	67		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	500	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	120		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	116		%	05/17/12		MH	30 - 150 %
% TCMX	110		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	78		%	05/18/12		KCA	30 - 150 %
% TCMX	112		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	05/17/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,1-Dichloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,1-Dichloroethene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,1-Dichloropropene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2-Dichloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,2-Dichloropropane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,3-Dichloropropane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
2,2-Dichloropropane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
2-Chlorotoluene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	05/17/12		R/J	SW8260
2-Isopropyltoluene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
4-Chlorotoluene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	05/17/12		R/J	SW8260
Acetone	ND	120	ug/Kg	05/17/12		R/J	SW8260
Acrylonitrile	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Benzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Bromobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Bromochloromethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Bromodichloromethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Bromoform	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Bromomethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Carbon Disulfide	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Carbon tetrachloride	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Chlorobenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Chloroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Chloroform	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Chloromethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	05/17/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-84 2-4 FT

Phoenix I.D.: BB86392

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Dibromomethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Ethylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Hexachlorobutadiene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Isopropylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
m&p-Xylene	11	6.0	ug/Kg	05/17/12		R/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	05/17/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/17/12		R/J	SW8260
Methylene chloride	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Naphthalene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
n-Butylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
n-Propylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
o-Xylene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
p-Isopropyltoluene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
sec-Butylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Styrene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
tert-Butylbenzene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Tetrachloroethene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/17/12		R/J	SW8260
Toluene	15	6.0	ug/Kg	05/17/12		R/J	SW8260
Total Xylenes	11	6.0	ug/Kg	05/17/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/17/12		R/J	SW8260
Trichloroethene	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Trichlorofluoromethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
Vinyl chloride	ND	6.0	ug/Kg	05/17/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/17/12		R/J	70 - 130 %
% Bromofluorobenzene	81		%	05/17/12		R/J	70 - 130 %
% Dibromofluoromethane	112		%	05/17/12		R/J	70 - 130 %
% Toluene-d8	94		%	05/17/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-84 2-4 FT

Phoenix I.D.: BB86392

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	730	ug/Kg	05/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/17/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	730	ug/Kg	05/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Acenaphthylene	1400	510	ug/Kg	05/17/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Anthracene	1100	510	ug/Kg	05/17/12		DD	SW 8270
Azobenzene	ND	730	ug/Kg	05/17/12		DD	SW 8270
Benz(a)anthracene	5800	510	ug/Kg	05/17/12		DD	SW 8270
Benzidine	ND	880	ug/Kg	05/17/12		DD	SW 8270
Benzo(a)pyrene	5800	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(b)fluoranthene	11000	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(ghi)perylene	2300	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(k)fluoranthene	2900	510	ug/Kg	05/17/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	730	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	1100	510	ug/Kg	05/17/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/17/12		DD	SW 8270
Chrysene	6000	510	ug/Kg	05/17/12		DD	SW 8270
Dibenz(a,h)anthracene	870	510	ug/Kg	05/17/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/17/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Fluoranthene	7200	510	ug/Kg	05/17/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	2400	510	ug/Kg	05/17/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	730	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-84 2-4 FT

Phoenix I.D.: BB86392

Parameter	Result	RL	Units	Date	Time	By	Reference	
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/17/12		DD	SW 8270	
N-Nitrosodiphenylamine	ND	730	ug/Kg	05/17/12		DD	SW 8270	
Pentachloronitrobenzene	ND	730	ug/Kg	05/17/12		DD	SW 8270	
Pentachlorophenol	ND	730	ug/Kg	05/17/12		DD	SW 8270	
Phenanthrene	2100	510	ug/Kg	05/17/12		DD	SW 8270	
Phenol	ND	510	ug/Kg	05/17/12		DD	SW 8270	
Pyrene	8000	510	ug/Kg	05/17/12		DD	SW 8270	
Pyridine	ND	730	ug/Kg	05/17/12		DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	137		%	05/17/12		DD	15 - 130 %	3
% 2-Fluorobiphenyl	96		%	05/17/12		DD	15 - 130 %	
% 2-Fluorophenol	112		%	05/17/12		DD	15 - 130 %	
% Nitrobenzene-d5	109		%	05/17/12		DD	15 - 130 %	
% Phenol-d5	109		%	05/17/12		DD	15 - 130 %	
% Terphenyl-d14	85		%	05/17/12		DD	15 - 130 %	

3 = This parameter exceeds laboratory specified limits.

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	8:11
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86393

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-85 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/17/12		EK	6010
Arsenic	8.68	0.70	mg/Kg	05/17/12		EK	6010
Barium	128	0.35	mg/Kg	05/17/12		EK	6010
Cadmium	0.63	0.35	mg/Kg	05/17/12		EK	6010
Chromium	28.4	0.35	mg/Kg	05/17/12		EK	6010
Mercury	0.20	0.07	mg/Kg	05/17/12		RS	SW-7471
Lead	422	3.5	mg/Kg	05/21/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/21/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.008	0.004	mg/L	05/21/12		LK	6010
SPLP Barium	0.067	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	0.023	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	0.536	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	90		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-85 1-3 FT

Phoenix I.D.: BB86393

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	67		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	310	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	102		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	100		%	05/17/12		MH	30 - 150 %
% TCMX	97		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	74		%	05/18/12		KCA	30 - 150 %
% TCMX	99		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	5.8	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-85 1-3 FT

Phoenix I.D.: BB86393

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	13	5.4	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/17/12		H/J	SW8260
Toluene	17	5.4	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	13	5.4	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	77		%	05/17/12		H/J	70 - 130 %
% Dibromofluoromethane	115		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	93		%	05/17/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-85 1-3 FT

Phoenix I.D.: BB86393

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/17/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	730	ug/Kg	05/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/17/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	730	ug/Kg	05/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Acenaphthylene	760	510	ug/Kg	05/17/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Anthracene	550	510	ug/Kg	05/17/12		DD	SW 8270
Azobenzene	ND	730	ug/Kg	05/17/12		DD	SW 8270
Benz(a)anthracene	2500	510	ug/Kg	05/17/12		DD	SW 8270
Benzidine	ND	870	ug/Kg	05/17/12		DD	SW 8270
Benzo(a)pyrene	2800	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(b)fluoranthene	5300	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(ghi)perylene	1300	510	ug/Kg	05/17/12		DD	SW 8270
Benzo(k)fluoranthene	1500	510	ug/Kg	05/17/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Benzyl butyl phthalate	840	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	730	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/17/12		DD	SW 8270
Chrysene	3300	510	ug/Kg	05/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/17/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/17/12		DD	SW 8270
Fluoranthene	4500	510	ug/Kg	05/17/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1400	510	ug/Kg	05/17/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/17/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/17/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	730	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-85 1-3 FT

Phoenix I.D.: BB86393

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	730	ug/Kg	05/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	730	ug/Kg	05/17/12		DD	SW 8270
Pentachlorophenol	ND	730	ug/Kg	05/17/12		DD	SW 8270
Phenanthrene	2000	510	ug/Kg	05/17/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/17/12		DD	SW 8270
Pyrene	4100	510	ug/Kg	05/17/12		DD	SW 8270
Pyridine	ND	730	ug/Kg	05/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	05/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	84		%	05/17/12		DD	15 - 130 %
% 2-Fluorophenol	101		%	05/17/12		DD	15 - 130 %
% Nitrobenzene-d5	90		%	05/17/12		DD	15 - 130 %
% Phenol-d5	94		%	05/17/12		DD	15 - 130 %
% Terphenyl-d14	73		%	05/17/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	11:43
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86394

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-86 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	05/17/12		LK	6010
Arsenic	4.83	0.72	mg/Kg	05/17/12		LK	6010
Barium	76.0	0.36	mg/Kg	05/17/12		LK	6010
Cadmium	0.69	0.36	mg/Kg	05/17/12		LK	6010
Chromium	60.5	0.36	mg/Kg	05/17/12		LK	6010
Mercury	0.27	0.06	mg/Kg	05/17/12		RS	SW-7471
Lead	484	3.6	mg/Kg	05/21/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/17/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.009	0.004	mg/L	05/21/12		LK	6010
SPLP Barium	0.132	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	0.034	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/17/12		RS	1312/SW7470
SPLP Lead	1.01	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	93		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-86 2-4 FT

Phoenix I.D.: BB86394

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	89	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	89	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	320	21	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	122		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	106		%	05/17/12		MH	30 - 150 %
% TCMX	102		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	98		%	05/18/12		KCA	30 - 150 %
% TCMX	112		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-86 2-4 FT

Phoenix I.D.: BB86394

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	12	6.2	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/17/12		H/J	SW8260
Toluene	18	6.2	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	12	6.2	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	80		%	05/17/12		H/J	70 - 130 %
% Dibromofluoromethane	111		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	94		%	05/17/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	1100	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	500	ug/Kg	05/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	500	ug/Kg	05/17/12		DD	SW 8270
2-Chloronaphthalene	ND	500	ug/Kg	05/17/12		DD	SW 8270
2-Chlorophenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
2-Methylnaphthalene	ND	500	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-86 2-4 FT

Phoenix I.D.: BB86394

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	500	ug/Kg	05/17/12		DD	SW 8270
2-Nitroaniline	ND	1100	ug/Kg	05/17/12		DD	SW 8270
2-Nitrophenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	710	ug/Kg	05/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	500	ug/Kg	05/17/12		DD	SW 8270
3-Nitroaniline	ND	1100	ug/Kg	05/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	710	ug/Kg	05/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
4-Chloroaniline	ND	500	ug/Kg	05/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	500	ug/Kg	05/17/12		DD	SW 8270
4-Nitroaniline	ND	1100	ug/Kg	05/17/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Acenaphthene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Acenaphthylene	770	500	ug/Kg	05/17/12		DD	SW 8270
Acetophenone	ND	500	ug/Kg	05/17/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Anthracene	580	500	ug/Kg	05/17/12		DD	SW 8270
Azobenzene	ND	710	ug/Kg	05/17/12		DD	SW 8270
Benz(a)anthracene	2500	500	ug/Kg	05/17/12		DD	SW 8270
Benzidine	ND	850	ug/Kg	05/17/12		DD	SW 8270
Benzo(a)pyrene	2700	500	ug/Kg	05/17/12		DD	SW 8270
Benzo(b)fluoranthene	4800	500	ug/Kg	05/17/12		DD	SW 8270
Benzo(ghi)perylene	1200	500	ug/Kg	05/17/12		DD	SW 8270
Benzo(k)fluoranthene	1400	500	ug/Kg	05/17/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	500	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	710	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	500	ug/Kg	05/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/17/12		DD	SW 8270
Chrysene	3100	500	ug/Kg	05/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Dibenzofuran	ND	500	ug/Kg	05/17/12		DD	SW 8270
Diethyl phthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Dimethylphthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Di-n-butylphthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Di-n-octylphthalate	ND	500	ug/Kg	05/17/12		DD	SW 8270
Fluoranthene	4100	500	ug/Kg	05/17/12		DD	SW 8270
Fluorene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobutadiene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Hexachloroethane	ND	500	ug/Kg	05/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1200	500	ug/Kg	05/17/12		DD	SW 8270
Isophorone	ND	500	ug/Kg	05/17/12		DD	SW 8270
Naphthalene	ND	500	ug/Kg	05/17/12		DD	SW 8270
Nitrobenzene	ND	500	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	710	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-86 2-4 FT

Phoenix I.D.: BB86394

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	500	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	710	ug/Kg	05/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	710	ug/Kg	05/17/12		DD	SW 8270
Pentachlorophenol	ND	710	ug/Kg	05/17/12		DD	SW 8270
Phenanthrene	2000	500	ug/Kg	05/17/12		DD	SW 8270
Phenol	ND	500	ug/Kg	05/17/12		DD	SW 8270
Pyrene	3700	500	ug/Kg	05/17/12		DD	SW 8270
Pyridine	ND	710	ug/Kg	05/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	124		%	05/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	92		%	05/17/12		DD	15 - 130 %
% 2-Fluorophenol	113		%	05/17/12		DD	15 - 130 %
% Nitrobenzene-d5	97		%	05/17/12		DD	15 - 130 %
% Phenol-d5	103		%	05/17/12		DD	15 - 130 %
% Terphenyl-d14	82		%	05/17/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	12:24
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86395

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-87 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Arsenic	4.29	0.71	mg/Kg	05/17/12		EK	6010
Barium	48.0	0.36	mg/Kg	05/17/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	05/17/12		EK	6010
Chromium	21.3	0.36	mg/Kg	05/17/12		EK	6010
Mercury	0.13	0.09	mg/Kg	05/17/12		RS	SW-7471
Lead	97.8	0.36	mg/Kg	05/17/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Arsenic	0.007	0.004	mg/L	05/19/12		LK	6010
SPLP Barium	0.026	0.010	mg/L	05/19/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/19/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/19/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/18/12		RS	1312/SW7470
SPLP Lead	0.117	0.010	mg/L	05/19/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/19/12		LK	6010
Total Metals Digest	Completed			05/16/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/17/12		X/X	SW846-3005
Percent Solid	88		%	05/16/12		JL	E160.3
Soil Extraction for PCB	Completed			05/16/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/16/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/16/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/16/12		RS/F	3545
Mercury Digestion	Completed			05/17/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/17/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/16/12		X	EPA 1312
Field Extraction	Completed			05/15/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-87 2-4 FT

Phoenix I.D.: BB86395

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/18/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/18/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dicamba	ND	94	ug/Kg	05/18/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/18/12		JRB	SW8151
Dinoseb	ND	94	ug/Kg	05/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	05/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	230	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	112		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/17/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/17/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	101		%	05/17/12		MH	30 - 150 %
% TCMX	97		%	05/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/18/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/18/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/18/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/18/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/18/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/18/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/18/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/18/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/18/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/18/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/18/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/18/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/18/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/18/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	84		%	05/18/12		KCA	30 - 150 %
% TCMX	110		%	05/18/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	6.5	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-87 2-4 FT

Phoenix I.D.: BB86395

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	13	5.9	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/17/12		H/J	SW8260
Toluene	17	5.9	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	13	5.9	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	81		%	05/17/12		H/J	70 - 130 %
% Dibromofluoromethane	115		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	94		%	05/17/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	520	ug/Kg	05/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	520	ug/Kg	05/17/12		DD	SW 8270
2-Chloronaphthalene	ND	520	ug/Kg	05/17/12		DD	SW 8270
2-Chlorophenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
2-Methylnaphthalene	ND	520	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-87 2-4 FT

Phoenix I.D.: BB86395

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	520	ug/Kg	05/17/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
2-Nitrophenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	750	ug/Kg	05/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	520	ug/Kg	05/17/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	05/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	750	ug/Kg	05/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
4-Chloroaniline	ND	520	ug/Kg	05/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	05/17/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/17/12		DD	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	05/17/12		DD	SW 8270
Acenaphthene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Acenaphthylene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Acetophenone	ND	520	ug/Kg	05/17/12		DD	SW 8270
Aniline	ND	2200	ug/Kg	05/17/12		DD	SW 8270
Anthracene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Azobenzene	ND	750	ug/Kg	05/17/12		DD	SW 8270
Benz(a)anthracene	1800	520	ug/Kg	05/17/12		DD	SW 8270
Benzidine	ND	890	ug/Kg	05/17/12		DD	SW 8270
Benzo(a)pyrene	1900	520	ug/Kg	05/17/12		DD	SW 8270
Benzo(b)fluoranthene	3100	520	ug/Kg	05/17/12		DD	SW 8270
Benzo(ghi)perylene	840	520	ug/Kg	05/17/12		DD	SW 8270
Benzo(k)fluoranthene	1300	520	ug/Kg	05/17/12		DD	SW 8270
Benzoic acid	ND	2200	ug/Kg	05/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	750	ug/Kg	05/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	05/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/17/12		DD	SW 8270
Chrysene	2200	520	ug/Kg	05/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Dibenzofuran	ND	520	ug/Kg	05/17/12		DD	SW 8270
Diethyl phthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Dimethylphthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Di-n-butylphthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Di-n-octylphthalate	ND	520	ug/Kg	05/17/12		DD	SW 8270
Fluoranthene	3700	520	ug/Kg	05/17/12		DD	SW 8270
Fluorene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Hexachlorobutadiene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Hexachloroethane	ND	520	ug/Kg	05/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	830	520	ug/Kg	05/17/12		DD	SW 8270
Isophorone	ND	520	ug/Kg	05/17/12		DD	SW 8270
Naphthalene	ND	520	ug/Kg	05/17/12		DD	SW 8270
Nitrobenzene	ND	520	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	750	ug/Kg	05/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-87 2-4 FT

Phoenix I.D.: BB86395

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	520	ug/Kg	05/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	750	ug/Kg	05/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	750	ug/Kg	05/17/12		DD	SW 8270
Pentachlorophenol	ND	750	ug/Kg	05/17/12		DD	SW 8270
Phenanthrene	1800	520	ug/Kg	05/17/12		DD	SW 8270
Phenol	ND	520	ug/Kg	05/17/12		DD	SW 8270
Pyrene	2900	520	ug/Kg	05/17/12		DD	SW 8270
Pyridine	ND	750	ug/Kg	05/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	123		%	05/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	87		%	05/17/12		DD	15 - 130 %
% 2-Fluorophenol	109		%	05/17/12		DD	15 - 130 %
% Nitrobenzene-d5	93		%	05/17/12		DD	15 - 130 %
% Phenol-d5	101		%	05/17/12		DD	15 - 130 %
% Terphenyl-d14	79		%	05/17/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86396

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-HIGH

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			05/15/12		MAG	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	250	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	250	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	250	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	1300	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	250	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	250	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-HIGH

Phoenix I.D.: BB86396

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	1300	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	5000	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	500	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	250	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	250	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	250	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	250	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	250	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Dibromoethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	3000	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	500	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	250	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	250	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	250	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	250	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	500	ug/Kg	05/17/12		H/J	SW8260
Toluene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	ND	250	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	250	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	250	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	250	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	250	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	250	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	101		%	05/17/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-HIGH

Phoenix I.D.: BB86396

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	106		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	101		%	05/17/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 23, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/16/12	13:06
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB86389
Phoenix ID: BB86397

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-LOW

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			05/15/12		MAG	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	05/17/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	05/17/12		H/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-LOW

Phoenix I.D.: BB86397

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	05/17/12		H/J	SW8260
Acetone	ND	100	ug/Kg	05/17/12		H/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Benzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Bromoform	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Bromomethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Chloroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Chloroform	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Chloromethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	05/17/12		H/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	05/17/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/17/12		H/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Naphthalene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
o-Xylene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Styrene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/17/12		H/J	SW8260
Toluene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/17/12		H/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	05/17/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/17/12		H/J	70 - 130 %
% Bromofluorobenzene	99		%	05/17/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-LOW

Phoenix I.D.: BB86397

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	109		%	05/17/12		H/J	70 - 130 %
% Toluene-d8	99		%	05/17/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 23, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 23, 2012

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200856, QC Sample No: BB86389 (BB86389, BB86390)												
Mercury - Soil	BDL	0.19	0.18	NC	108	101	6.7	96.7	101	4.4	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200859, QC Sample No: BB86391 (BB86391, BB86392, BB86393, BB86394, BB86395)												
Mercury - Soil	BDL	0.17	0.15	NC	119	117	1.7	102	115	12.0	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200812, QC Sample No: BB86395 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86395)												
ICP Metals - Soil												
Arsenic	BDL	4.29	4.61	7.20	81.2	96.4	17.1	97.1	96.8	0.3	75 - 125	30
Barium	BDL	48.0	47.0	2.10	81.8	95.6	15.6	97.7	107	9.1	75 - 125	30
Cadmium	BDL	<0.36	<0.34	NC	75.1	87.7	15.5	98.1	98.1	0.0	75 - 125	30
Chromium	BDL	21.3	18.4	14.6	83.3	96.3	14.5	98.5	99.8	1.3	75 - 125	30
Lead	BDL	97.8	81.4	18.3	82.5	105	24.0	91.5	92.0	0.5	75 - 125	30
Selenium	BDL	<1.4	<1.4	NC	83.3	98.0	16.2	89.2	88.8	0.4	75 - 125	30
Silver	BDL	<0.36	<0.34	NC	84.8	102	18.4	101	101	0.0	75 - 125	30
QA/QC Batch 200864, QC Sample No: BB86395 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)												
ICP Metals - SPLP Extraction												
Arsenic	BDL	0.007	0.006	NC	98.1	99.9	1.8	101	101	0.0	75 - 125	20
Barium	BDL	0.026	0.026	NC	98.4	99.8	1.4	101	99.9	1.1	75 - 125	20
Cadmium	BDL	<0.005	<0.005	NC	101	102	1.0	103	103	0.0	75 - 125	20
Chromium	BDL	<0.010	<0.010	NC	97.5	98.5	1.0	101	100	1.0	75 - 125	20
Lead	BDL	0.117	0.118	0.90	96.7	98.9	2.2	98.8	98.5	0.3	75 - 125	20
Selenium	BDL	<0.020	<0.020	NC	98.2	99.8	1.6	101	101	0.0	75 - 125	20
Silver	BDL	<0.010	<0.010	NC	97.8	98.4	0.6	100	99.7	0.3	75 - 125	20
QA/QC Batch 200858, QC Sample No: BB86611 (BB86395)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	120	111	7.8	114	113	0.9	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200857, QC Sample No: BB86700 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394)												
Mercury - Water	BDL	0.0029	0.0030	3.40	107	119	10.6	124	119	4.1	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200822, QC Sample No: BB86970 (BB86394)												
ICP Metals - Soil												
Arsenic	BDL	3.51	4.34	21.1	84.2	82.7	1.8	91.1	92.1	1.1	75 - 125	30
Barium	BDL	126	121	4.00	85.2	88.7	4.0	106	105	0.9	75 - 125	30
Cadmium	BDL	<0.38	<0.37	NC	79.1	86.6	9.1	90.6	92.1	1.6	75 - 125	30
Chromium	BDL	33.2	30.2	9.50	85.3	89.5	4.8	93.5	94.0	0.5	75 - 125	30
Lead	BDL	6.60	6.18	6.60	84.6	85.3	0.8	92.8	94.2	1.5	75 - 125	30

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Selenium	BDL	<0.38	<0.37	NC	86.0	86.2	0.2	81.8	83.7	2.3	75 - 125	30
Silver	BDL	<0.38	<0.37	NC	87.9	81.1	8.0	98.2	99.7	1.5	75 - 125	30

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 23, 2012

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200733, QC Sample No: BB84779 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)									
Polychlorinated Biphenyls - Soil									
PCB-1016	ND	90			81	85	4.8	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	71			90	93	3.3	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	90	71			79	84	6.1	30 - 150	30
% TCMX (Surrogate Rec)	98	70			64	74	14.5	30 - 150	30

Comment:

* Due to a Laboratory error the LCSD recovery could not be reported.

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200722, QC Sample No: BB86098 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)									
Pesticides - Soil									
4,4' -DDD	ND	70	78	10.8	98	100	2.0	40 - 140	30
4,4' -DDE	ND	77	74	4.0	94	95	1.1	40 - 140	30
4,4' -DDT	ND	80	73	9.2	104	107	2.8	40 - 140	30
a-BHC	ND	80	79	1.3	94	98	4.2	40 - 140	30
a-Chlordane	ND	71	71	0.0	90	92	2.2	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	73	75	2.7	92	93	1.1	40 - 140	30
b-BHC	ND	69	72	4.3	91	93	2.2	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	72	72	0.0	92	93	1.1	40 - 140	30
Dieldrin	ND	79	74	6.5	95	96	1.0	40 - 140	30
Endosulfan I	ND	72	69	4.3	84	91	8.0	40 - 140	30
Endosulfan II	ND	59	58	1.7	91	92	1.1	40 - 140	30
Endosulfan sulfate	ND	73	67	8.6	89	91	2.2	40 - 140	30
Endrin	ND	81	77	5.1	100	102	2.0	40 - 140	30
Endrin aldehyde	ND	55	78	34.6	94	94	0.0	40 - 140	30 r
Endrin ketone	ND	80	77	3.8	98	99	1.0	40 - 140	30
g-BHC	ND	78	78	0.0	95	98	3.1	40 - 140	30
g-Chlordane	ND	72	70	2.8	93	95	2.1	40 - 140	30
Heptachlor	ND	78	76	2.6	93	95	2.1	40 - 140	30
Heptachlor epoxide	ND	72	72	0.0	89	89	0.0	40 - 140	30
Methoxychlor	ND	84	71	16.8	102	113	10.2	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	71	82	76	7.6	96	93	3.2	30 - 150	30
% TCMX	73	89	89	0.0	102	104	1.9	30 - 150	30

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 200724, QC Sample No: BB86099 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	61	60	1.7	52	75	36.2	40 - 140	30	r
2,4,5-TP (Silvex)	ND	64	63	1.6	55	62	12.0	40 - 140	30	
2,4-D	ND	72	67	7.2	61	69	12.3	40 - 140	30	
2,4-DB	ND	63	59	6.6	59	66	11.2	40 - 140	30	
Dalapon	ND	62	58	6.7	45	51	12.5	40 - 140	30	
Dicamba	ND	63	64	1.6	54	67	21.5	40 - 140	30	
Dichloroprop	ND	56	56	0.0	50	55	9.5	40 - 140	30	
Dinoseb	ND	65	57	13.1	60	64	6.5	40 - 140	30	
% DCAA (Surrogate Rec)	63	51	50	2.0	45	49	8.5	30 - 150	30	
QA/QC Batch 200732, QC Sample No: BB86130 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	64	73	13.1	78	74	5.3	30 - 130	30	
1,2,4-Trichlorobenzene	ND	62	69	10.7	77	74	4.0	30 - 130	30	
1,2-Dichlorobenzene	ND	62	69	10.7	78	81	3.8	30 - 130	30	
1,3-Dichlorobenzene	ND	62	67	7.8	75	79	5.2	30 - 130	30	
1,4-Dichlorobenzene	ND	63	67	6.2	77	79	2.6	30 - 130	30	
2,4,5-Trichlorophenol	ND	63	73	14.7	94	91	3.2	30 - 130	30	
2,4,6-Trichlorophenol	ND	65	72	10.2	94	93	1.1	30 - 130	30	
2,4-Dichlorophenol	ND	68	76	11.1	86	86	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	48	54	11.8	73	72	1.4	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	64	73	13.1	85	80	6.1	30 - 130	30	
2,6-Dinitrotoluene	ND	67	77	13.9	83	80	3.7	30 - 130	30	
2-Chloronaphthalene	ND	69	77	11.0	89	85	4.6	30 - 130	30	
2-Chlorophenol	ND	67	73	8.6	87	94	7.7	30 - 130	30	
2-Methylnaphthalene	ND	64	72	11.8	83	88	5.8	30 - 130	30	
2-Methylphenol (o-cresol)	ND	69	74	7.0	89	93	4.4	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	58	64	9.8	79	79	0.0	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	70	77	9.5	93	102	9.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	93	99	6.3	85	69	20.8	30 - 130	30	
3-Nitroaniline	ND	111	121	8.6	79	90	13.0	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	24	14	52.6	48	22	74.3	30 - 130	30	l,m,r
4-Bromophenyl phenyl ether	ND	66	76	14.1	81	86	6.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	73	79	7.9	92	94	2.2	30 - 130	30	
4-Chloroaniline	ND	80	95	17.1	45	57	23.5	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	69	75	8.3	85	82	3.6	30 - 130	30	
4-Nitroaniline	ND	74	82	10.3	94	93	1.1	30 - 130	30	
4-Nitrophenol	ND	67	69	2.9	108	93	14.9	30 - 130	30	
Acenaphthene	ND	68	77	12.4	91	91	0.0	30 - 130	30	
Acenaphthylene	ND	67	76	12.6	85	91	6.8	30 - 130	30	
Acetophenone	ND	66	73	10.1	88	92	4.4	30 - 130	30	
Aniline	ND	86	94	8.9	29	60	69.7	30 - 130	30	m,r
Anthracene	ND	72	81	11.8	96	93	3.2	30 - 130	30	
Azobenzene	ND	70	79	12.1	87	82	5.9	30 - 130	30	
Benz(a)anthracene	ND	70	82	15.8	79	NC	NC	30 - 130	30	
Benzidine	ND	38	45	16.9	<5	<5	NC	30 - 130	30	m
Benzo(a)pyrene	ND	70	77	9.5	70	79	12.1	30 - 130	30	
Benzo(b)fluoranthene	ND	78	83	6.2	NC	NC	NC	30 - 130	30	
Benzo(ghi)perylene	ND	70	79	12.1	81	58	33.1	30 - 130	30	r

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benzo(k)fluoranthene	ND	71	86	19.1	65	92	34.4	30 - 130	30	r
Benzyl butyl phthalate	ND	74	89	18.4	95	92	3.2	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	73	82	11.6	89	91	2.2	30 - 130	30	
Bis(2-chloroethyl)ether	ND	71	78	9.4	129	120	7.2	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	68	74	8.5	82	91	10.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	79	93	16.3	102	103	1.0	30 - 130	30	
Carbazole	ND	89	103	14.6	118	116	1.7	30 - 130	30	
Chrysene	ND	68	76	11.1	69	73	5.6	30 - 130	30	
Dibenz(a,h)anthracene	ND	72	79	9.3	86	71	19.1	30 - 130	30	
Dibenzofuran	ND	68	75	9.8	91	90	1.1	30 - 130	30	
Diethyl phthalate	ND	70	77	9.5	85	84	1.2	30 - 130	30	
Dimethylphthalate	ND	69	78	12.2	86	82	4.8	30 - 130	30	
Di-n-butylphthalate	ND	73	83	12.8	91	92	1.1	30 - 130	30	
Di-n-octylphthalate	ND	67	78	15.2	95	100	5.1	30 - 130	30	
Fluoranthene	ND	75	88	16.0	NC	NC	NC	30 - 130	30	
Fluorene	ND	69	79	13.5	87	86	1.2	30 - 130	30	
Hexachlorobenzene	ND	73	83	12.8	88	87	1.1	30 - 130	30	
Hexachlorobutadiene	ND	61	70	13.7	78	73	6.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	56	63	11.8	9.2	<5	NC	30 - 130	30	m
Hexachloroethane	ND	63	66	4.7	76	66	14.1	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	71	78	9.4	86	67	24.8	30 - 130	30	
Isophorone	ND	71	82	14.4	90	88	2.2	30 - 130	30	
Naphthalene	ND	67	75	11.3	93	109	15.8	30 - 130	30	
Nitrobenzene	ND	68	73	7.1	82	85	3.6	30 - 130	30	
N-Nitrosodimethylamine	ND	77	89	14.5	102	96	6.1	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	66	72	8.7	83	87	4.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	73	83	12.8	98	101	3.0	30 - 130	30	
Pentachloronitrobenzene	ND	146	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	57	50	13.1	149	146	2.0	30 - 130	30	m
Phenanthrene	ND	73	81	10.4	NC	NC	NC	30 - 130	30	
Phenol	ND	71	77	8.1	95	103	8.1	30 - 130	30	
Pyrene	ND	79	91	14.1	NC	NC	NC	30 - 130	30	
Pyridine	ND	69	76	9.7	88	85	3.5	30 - 130	30	
% 2,4,6-Tribromophenol	99	80	90	11.8	115	116	0.9	15 - 130	30	
% 2-Fluorobiphenyl	74	64	73	13.1	81	80	1.2	30 - 130	30	
% 2-Fluorophenol	85	72	81	11.8	93	100	7.3	15 - 130	30	
% Nitrobenzene-d5	78	68	75	9.8	84	87	3.5	30 - 130	30	
% Phenol-d5	83	73	82	11.6	92	101	9.3	15 - 130	30	
% Terphenyl-d14	87	79	93	16.3	70	72	2.8	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 200740, QC Sample No: BB86261 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	68	70	2.9				50 - 150	30	
% n-Pentacosane	72	76	78	2.6				50 - 150	30	

Comment:

*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.

QA/QC Batch 200804, QC Sample No: BB86480 (BB86395)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	82	105	24.6	109	82	28.3	50 - 150	30	
% n-Pentacosane	57	101	120	17.2	126	92	31.2	50 - 150	30	r

QA/QC Data

SDG I.D.: GBB86389

QA/QC Batch 201083, QC Sample No: BB86812 (BB86390)

Volatiles - Soil

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	97	98	1.0	101	101	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	98	98	0.0	106	107	0.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	95	97	2.1	102	98	4.0	70 - 130	30	
1,1,2-Trichloroethane	ND	99	99	0.0	100	102	2.0	70 - 130	30	
1,1-Dichloroethane	ND	87	86	1.2	91	94	3.2	70 - 130	30	
1,1-Dichloroethene	ND	88	96	8.7	105	101	3.9	70 - 130	30	
1,1-Dichloropropene	ND	97	97	0.0	108	108	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	99	89	10.6	97	110	12.6	70 - 130	30	
1,2,3-Trichloropropane	ND	87	108	21.5	107	89	18.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	94	89	5.5	98	110	11.5	70 - 130	30	
1,2,4-Trimethylbenzene	ND	93	94	1.1	104	104	0.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	96	97	1.0	93	99	6.3	70 - 130	30	
1,2-Dichlorobenzene	ND	88	89	1.1	99	100	1.0	70 - 130	30	
1,2-Dichloroethane	ND	99	99	0.0	104	106	1.9	70 - 130	30	
1,2-Dichloropropane	ND	99	99	0.0	104	106	1.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	93	96	3.2	104	103	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	88	89	1.1	101	100	1.0	70 - 130	30	
1,3-Dichloropropane	ND	97	98	1.0	101	101	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	87	87	0.0	100	100	0.0	70 - 130	30	
2,2-Dichloropropane	ND	99	98	1.0	103	105	1.9	70 - 130	30	
2-Chlorotoluene	ND	89	90	1.1	99	97	2.0	70 - 130	30	
2-Hexanone	ND	73	78	6.6	79	66	17.9	70 - 130	30	m
2-Isopropyltoluene	ND	91	91	0.0	103	103	0.0	70 - 130	30	
4-Chlorotoluene	ND	86	87	1.2	100	98	2.0	70 - 130	30	
4-Methyl-2-pentanone	ND	95	99	4.1	95	98	3.1	70 - 130	30	
Acetone	ND	70	82	15.8	72	50	36.1	70 - 130	30	m,r
Acrylonitrile	ND	89	87	2.3	91	94	3.2	70 - 130	30	
Benzene	ND	99	99	0.0	105	105	0.0	70 - 130	30	
Bromobenzene	ND	89	92	3.3	96	95	1.0	70 - 130	30	
Bromochloromethane	ND	97	99	2.0	102	107	4.8	70 - 130	30	
Bromodichloromethane	ND	100	102	2.0	107	106	0.9	70 - 130	30	
Bromoform	ND	104	105	1.0	106	103	2.9	70 - 130	30	
Bromomethane	ND	77	83	7.5	54	56	3.6	70 - 130	30	m
Carbon Disulfide	ND	89	97	8.6	103	97	6.0	70 - 130	30	
Carbon tetrachloride	ND	96	100	4.1	106	104	1.9	70 - 130	30	
Chlorobenzene	ND	92	91	1.1	101	101	0.0	70 - 130	30	
Chloroethane	ND	95	105	10.0	<40	<40	NC	70 - 130	30	m
Chloroform	ND	98	98	0.0	103	107	3.8	70 - 130	30	
Chloromethane	ND	95	93	2.1	107	121	12.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	100	98	2.0	102	109	6.6	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	103	106	2.9	70 - 130	30	
Dibromochloromethane	ND	98	100	2.0	103	101	2.0	70 - 130	30	
Dibromoethane	ND	98	98	0.0	100	103	3.0	70 - 130	30	
Dibromomethane	ND	96	96	0.0	100	102	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	87	88	1.1	106	114	7.3	70 - 130	30	
Ethylbenzene	ND	93	93	0.0	103	103	0.0	70 - 130	30	
Hexachlorobutadiene	ND	90	85	5.7	105	115	9.1	70 - 130	30	
Isopropylbenzene	ND	90	91	1.1	101	98	3.0	70 - 130	30	
m&p-Xylene	ND	92	92	0.0	104	104	0.0	70 - 130	30	
Methyl ethyl ketone	ND	67	73	8.6	76	62	20.3	70 - 130	30	l,m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	107	87	20.6	90	110	20.0	70 - 130	30	
Methylene chloride	ND	86	91	5.6	98	96	2.1	70 - 130	30	
Naphthalene	ND	109	88	21.3	89	118	28.0	70 - 130	30	
n-Butylbenzene	ND	94	93	1.1	107	110	2.8	70 - 130	30	
n-Propylbenzene	ND	86	88	2.3	101	99	2.0	70 - 130	30	
o-Xylene	ND	92	92	0.0	103	103	0.0	70 - 130	30	
p-Isopropyltoluene	ND	93	94	1.1	105	104	1.0	70 - 130	30	
sec-Butylbenzene	ND	89	90	1.1	105	104	1.0	70 - 130	30	
Styrene	ND	96	95	1.0	104	105	1.0	70 - 130	30	
tert-Butylbenzene	ND	90	91	1.1	102	101	1.0	70 - 130	30	
Tetrachloroethene	ND	91	93	2.2	104	102	1.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	107	5.8	103	106	2.9	70 - 130	30	
Toluene	ND	97	96	1.0	103	105	1.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	102	86	17.0	94	113	18.4	70 - 130	30	
trans-1,3-Dichloropropene	ND	98	98	0.0	102	105	2.9	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	102	99	3.0	96	96	0.0	70 - 130	30	
Trichloroethene	ND	95	96	1.0	102	101	1.0	70 - 130	30	
Trichlorofluoromethane	ND	93	101	8.2	<40	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	87	92	5.6	101	95	6.1	70 - 130	30	
Vinyl chloride	ND	99	95	4.1	98	107	8.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	100	99	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	101	104	105	1.0	104	106	1.9	70 - 130	30	
% Dibromofluoromethane	106	108	113	4.5	106	108	1.9	70 - 130	30	
% Toluene-d8	100	99	100	1.0	100	102	2.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200910, QC Sample No: BB86919 (BB86392, BB86395, BB86396, BB86397)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	107	101	5.8	89	89	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	102	97	5.0	92	94	2.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	96	87	9.8	92	94	2.2	70 - 130	30	
1,1,2-Trichloroethane	ND	106	99	6.8	88	89	1.1	70 - 130	30	
1,1-Dichloroethane	ND	90	85	5.7	80	82	2.5	70 - 130	30	
1,1-Dichloroethene	ND	100	91	9.4	94	96	2.1	70 - 130	30	
1,1-Dichloropropene	ND	105	103	1.9	94	95	1.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	91	99	8.4	54	64	16.9	70 - 130	30	m
1,2,3-Trichloropropane	ND	110	88	22.2	96	83	14.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	84	92	9.1	57	63	10.0	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	99	99	0.0	77	81	5.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	103	94	9.1	82	88	7.1	70 - 130	30	
1,2-Dichlorobenzene	ND	93	91	2.2	75	78	3.9	70 - 130	30	
1,2-Dichloroethane	ND	105	99	5.9	88	92	4.4	70 - 130	30	
1,2-Dichloropropane	ND	109	103	5.7	92	93	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	101	100	1.0	86	87	1.2	70 - 130	30	
1,3-Dichlorobenzene	ND	92	92	0.0	76	79	3.9	70 - 130	30	
1,3-Dichloropropane	ND	107	100	6.8	90	90	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	89	90	1.1	74	77	4.0	70 - 130	30	
2,2-Dichloropropane	ND	97	93	4.2	84	85	1.2	70 - 130	30	
2-Chlorotoluene	ND	97	95	2.1	85	85	0.0	70 - 130	30	
2-Hexanone	ND	77	71	8.1	<40	<40	NC	70 - 130	30	m
2-Isopropyltoluene	ND	99	98	1.0	89	92	3.3	70 - 130	30	
4-Chlorotoluene	ND	92	90	2.2	82	82	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
4-Methyl-2-pentanone	ND	96	90	6.5	65	71	8.8	70 - 130	30	m
Acetone	ND	89	75	17.1	45	45	0.0	70 - 130	30	m
Acrylonitrile	ND	85	79	7.3	58	64	9.8	70 - 130	30	m
Benzene	ND	107	103	3.8	92	94	2.2	70 - 130	30	
Bromobenzene	ND	99	96	3.1	83	84	1.2	70 - 130	30	
Bromochloromethane	ND	103	95	8.1	88	89	1.1	70 - 130	30	
Bromodichloromethane	ND	107	101	5.8	92	93	1.1	70 - 130	30	
Bromoform	ND	109	101	7.6	86	89	3.4	70 - 130	30	
Bromomethane	ND	89	80	10.7	76	65	15.6	70 - 130	30	m
Carbon Disulfide	ND	105	93	12.1	95	93	2.1	70 - 130	30	
Carbon tetrachloride	ND	107	101	5.8	96	96	0.0	70 - 130	30	
Chlorobenzene	ND	98	94	4.2	84	85	1.2	70 - 130	30	
Chloroethane	ND	112	98	13.3	107	102	4.8	70 - 130	30	
Chloroform	ND	102	97	5.0	89	91	2.2	70 - 130	30	
Chloromethane	ND	99	95	4.1	95	100	5.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	102	99	3.0	88	92	4.4	70 - 130	30	
cis-1,3-Dichloropropene	ND	100	96	4.1	81	84	3.6	70 - 130	30	
Dibromochloromethane	ND	109	100	8.6	91	90	1.1	70 - 130	30	
Dibromoethane	ND	102	96	6.1	85	88	3.5	70 - 130	30	
Dibromomethane	ND	104	96	8.0	88	90	2.2	70 - 130	30	
Dichlorodifluoromethane	ND	98	95	3.1	101	103	2.0	70 - 130	30	
Ethylbenzene	ND	102	99	3.0	87	87	0.0	70 - 130	30	
Hexachlorobutadiene	ND	89	101	12.6	61	70	13.7	70 - 130	30	m
Isopropylbenzene	ND	99	97	2.0	91	91	0.0	70 - 130	30	
m&p-Xylene	ND	99	97	2.0	82	84	2.4	70 - 130	30	
Methyl ethyl ketone	ND	77	70	9.5	42	46	9.1	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	92	109	16.9	83	111	28.9	70 - 130	30	
Methylene chloride	ND	99	90	9.5	87	91	4.5	70 - 130	30	
Naphthalene	ND	89	108	19.3	52	71	30.9	70 - 130	30	m,r
n-Butylbenzene	ND	95	100	5.1	76	80	5.1	70 - 130	30	
n-Propylbenzene	ND	94	93	1.1	87	88	1.1	70 - 130	30	
o-Xylene	ND	99	97	2.0	87	88	1.1	70 - 130	30	
p-Isopropyltoluene	ND	99	101	2.0	79	82	3.7	70 - 130	30	
sec-Butylbenzene	ND	97	97	0.0	86	88	2.3	70 - 130	30	
Styrene	ND	97	97	0.0	79	80	1.3	70 - 130	30	
tert-Butylbenzene	ND	99	99	0.0	88	90	2.2	70 - 130	30	
Tetrachloroethene	ND	102	100	2.0	93	91	2.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	100	88	12.8	92	95	3.2	70 - 130	30	
Toluene	ND	104	100	3.9	88	90	2.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	89	105	16.5	80	102	24.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	100	95	5.1	79	82	3.7	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	97	94	3.1	75	83	10.1	70 - 130	30	
Trichloroethene	ND	109	107	1.9	90	91	1.1	70 - 130	30	
Trichlorofluoromethane	ND	107	97	9.8	97	97	0.0	70 - 130	30	
Trichlorotrifluoroethane	ND	99	93	6.3	98	99	1.0	70 - 130	30	
Vinyl chloride	ND	98	101	3.0	96	102	6.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	98	98	0.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	99	102	103	1.0	99	100	1.0	70 - 130	30	
% Dibromofluoromethane	108	109	106	2.8	109	114	4.5	70 - 130	30	
% Toluene-d8	100	100	100	0.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Data

SDG I.D.: GBB86389

QA/QC Batch 200997, QC Sample No: BB86993 (BB86389, BB86391, BB86393, BB86394)

Volatiles - Soil

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	104	105	1.0	91	95	4.3	70 - 130	30	
1,1,1-Trichloroethane	ND	97	99	2.0	99	104	4.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	96	5.3	104	103	1.0	70 - 130	30	
1,1,2-Trichloroethane	ND	102	105	2.9	91	94	3.2	70 - 130	30	
1,1-Dichloroethane	ND	84	87	3.5	87	90	3.4	70 - 130	30	
1,1-Dichloroethene	ND	93	96	3.2	101	99	2.0	70 - 130	30	
1,1-Dichloropropene	ND	102	102	0.0	98	104	5.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	104	93	11.2	44	56	24.0	70 - 130	30	m
1,2,3-Trichloropropane	ND	87	108	21.5	108	91	17.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	95	88	7.7	49	60	20.2	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	96	96	0.0	87	96	9.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	101	103	2.0	123	93	27.8	70 - 130	30	
1,2-Dichlorobenzene	ND	92	92	0.0	75	83	10.1	70 - 130	30	
1,2-Dichloroethane	ND	100	104	3.9	97	99	2.0	70 - 130	30	
1,2-Dichloropropane	ND	103	106	2.9	98	101	3.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	97	97	0.0	90	99	9.5	70 - 130	30	
1,3-Dichlorobenzene	ND	91	90	1.1	77	86	11.0	70 - 130	30	
1,3-Dichloropropane	ND	100	104	3.9	96	97	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	90	88	2.2	76	86	12.3	70 - 130	30	
2,2-Dichloropropane	ND	93	94	1.1	90	95	5.4	70 - 130	30	
2-Chlorotoluene	ND	94	94	0.0	89	97	8.6	70 - 130	30	
2-Hexanone	ND	72	73	1.4	<40	<40	NC	70 - 130	30	m
2-Isopropyltoluene	ND	96	95	1.0	86	96	11.0	70 - 130	30	
4-Chlorotoluene	ND	89	89	0.0	86	95	9.9	70 - 130	30	
4-Methyl-2-pentanone	ND	92	97	5.3	63	66	4.7	70 - 130	30	m
Acetone	ND	78	79	1.3	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	82	87	5.9	60	63	4.9	70 - 130	30	m
Benzene	ND	103	105	1.9	98	103	5.0	70 - 130	30	
Bromobenzene	ND	96	98	2.1	89	96	7.6	70 - 130	30	
Bromochloromethane	ND	96	101	5.1	97	97	0.0	70 - 130	30	
Bromodichloromethane	ND	104	107	2.8	95	99	4.1	70 - 130	30	
Bromoform	ND	106	110	3.7	85	88	3.5	70 - 130	30	
Bromomethane	ND	83	88	5.8	88	79	10.8	70 - 130	30	
Carbon Disulfide	ND	95	100	5.1	99	95	4.1	70 - 130	30	
Carbon tetrachloride	ND	102	105	2.9	97	103	6.0	70 - 130	30	
Chlorobenzene	ND	95	96	1.0	88	93	5.5	70 - 130	30	
Chloroethane	ND	98	111	12.4	114	109	4.5	70 - 130	30	
Chloroform	ND	98	99	1.0	97	101	4.0	70 - 130	30	
Chloromethane	ND	97	96	1.0	107	116	8.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	98	99	1.0	95	102	7.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	99	3.1	86	91	5.6	70 - 130	30	
Dibromochloromethane	ND	104	108	3.8	91	94	3.2	70 - 130	30	
Dibromoethane	ND	100	104	3.9	89	92	3.3	70 - 130	30	
Dibromomethane	ND	100	104	3.9	95	95	0.0	70 - 130	30	
Dichlorodifluoromethane	ND	92	93	1.1	109	117	7.1	70 - 130	30	
Ethylbenzene	ND	98	99	1.0	90	97	7.5	70 - 130	30	
Hexachlorobutadiene	ND	105	95	10.0	55	71	25.4	70 - 130	30	m
Isopropylbenzene	ND	94	96	2.1	96	105	9.0	70 - 130	30	
m&p-Xylene	ND	96	96	0.0	88	95	7.7	70 - 130	30	
Methyl ethyl ketone	ND	69	71	2.9	<40	<40	NC	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB86389

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	113	90	22.7	85	104	20.1	70 - 130	30	
Methylene chloride	ND	89	91	2.2	101	99	2.0	70 - 130	30	
Naphthalene	ND	112	90	21.8	53	74	33.1	70 - 130	30	m,r
n-Butylbenzene	ND	96	93	3.2	76	87	13.5	70 - 130	30	
n-Propylbenzene	ND	90	91	1.1	91	100	9.4	70 - 130	30	
o-Xylene	ND	95	97	2.1	88	94	6.6	70 - 130	30	
p-Isopropyltoluene	ND	98	97	1.0	81	92	12.7	70 - 130	30	
sec-Butylbenzene	ND	95	94	1.1	87	98	11.9	70 - 130	30	
Styrene	ND	97	97	0.0	82	87	5.9	70 - 130	30	
tert-Butylbenzene	ND	96	96	0.0	92	102	10.3	70 - 130	30	
Tetrachloroethene	ND	99	101	2.0	91	97	6.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	93	99	6.3	98	92	6.3	70 - 130	30	
Toluene	ND	101	101	0.0	93	99	6.3	70 - 130	30	
trans-1,2-Dichloroethene	ND	105	86	19.9	87	107	20.6	70 - 130	30	
trans-1,3-Dichloropropene	ND	98	100	2.0	84	89	5.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	96	95	1.0	80	85	6.1	70 - 130	30	
Trichloroethene	ND	105	106	0.9	90	98	8.5	70 - 130	30	
Trichlorofluoromethane	ND	99	102	3.0	102	99	3.0	70 - 130	30	
Trichlorotrifluoroethane	ND	93	93	0.0	94	92	2.2	70 - 130	30	
Vinyl chloride	ND	101	97	4.0	110	121	9.5	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	99	99	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	97	103	101	2.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	107	111	115	3.5	106	110	3.7	70 - 130	30	
% Toluene-d8	99	100	99	1.0	99	99	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 23, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB86389

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB86389	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB86389	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	260	1000	1000	ug/Kg
BB86389	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	260	1000	1000	ug/Kg
BB86389	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2000	260	1000	1000	ug/Kg
BB86389	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	260	1000	1000	ug/Kg
BB86389	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	260	1000	1000	ug/Kg
BB86389	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.412	0.010	0.15	0.15	mg/L
BB86390	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	730	140	140	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5700	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5700	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7800	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7600	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	7600	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6200	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6200	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	510	1000	1000	ug/Kg
BB86390	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	553	3.9	400	400	mg/Kg
BB86390	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	2.16	0.10	0.15	0.15	mg/L
BB86391	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	740	140	140	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1400	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2700	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2700	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	510	1000	1000	ug/Kg
BB86391	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	730	140	140	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB86389

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB86392	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5800	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5800	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6000	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2900	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5800	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5800	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	510	1000	1000	ug/Kg
BB86392	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	11.3	0.75	10	10	mg/Kg
BB86392	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	401	3.7	400	400	mg/Kg
BB86392	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.710	0.010	0.15	0.15	mg/L
BB86393	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	730	140	140	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2500	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2500	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3300	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5300	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2800	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1400	510	1000	1000	ug/Kg
BB86393	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	422	3.5	400	400	mg/Kg
BB86393	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.536	0.010	0.15	0.15	mg/L
BB86394	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	710	140	140	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	500	400	400	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB86389

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB86394	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2500	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2500	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	500	330	330	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4800	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	4800	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2700	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2700	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	500	1000	1000	ug/Kg
BB86394	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	484	3.6	400	400	mg/Kg
BB86394	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.01	0.010	0.15	0.15	mg/L
BB86395	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	750	140	140	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2200	1200	1200	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	400	400	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2200	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	330	330	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3100	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	520	1000	1000	ug/Kg
BB86395	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1900	520	1000	1000	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395, BB86396, BB86397

Sampling Date(s): 5/15/2012

RCP Methods Used:

☑ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☑ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: PEST Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Wednesday, May 23, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine, Aniline and 3,3 -Dichlorobenzidine reporting levels do not meet GBPM criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid84 05/18/12-3 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: C36

Printed Name Jeff Bucko
Position: Chemist
Date: 5/18/2012

QC Comments: QC Batch 00740 05/15/12 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394)

*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.

QC (Batch Specific)

---------- Sample No: BB86261, QA/QC Batch: 200740 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86480, QA/QC Batch: 200804 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/18/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

Initial Calibration ECD14-051712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/18/2012

QC (Batch Specific)

---------- Sample No: BB86099, QA/QC Batch: 200724 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/17/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/17/2012

Instrument: Merlin 05/18/12-1 (BB86395)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	5/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

QC (Site Specific)

---------- Sample No: BB86389, QA/QC Batch: 200856 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86391, QA/QC Batch: 200859 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB86611, QA/QC Batch: 200858 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB86700, QA/QC Batch: 200857 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/21/12-1 (BB86392, BB86393)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/21/2012

Instrument: Icp9 05/17/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/17/2012

Instrument: Icp9 05/18/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/18/2012

Instrument: Icp9 05/19/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

Printed Name Laura Kinnin
Position: Chemist
Date: 5/19/2012

Instrument: Icp9 05/21/12-1 (BB86390, BB86392, BB86393, BB86394)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/21/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

QC (Site Specific)

---------- Sample No: BB86395, QA/QC Batch: 200812 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86395, QA/QC Batch: 200864 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB86970, QA/QC Batch: 200822 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd35 05/17/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

8082 Narration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/17/2012

Instrument: Au-ecd35 05/20/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/20/2012

Instrument: Au-ecd35 05/21/12-1 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/21/2012

QC Comments: QC Batch 00733 05/15/12 (BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

Due to a Laboratory error the LCSD recovery could not be reported.

QC (Batch Specific)

---------- Sample No: BB84779, QA/QC Batch: 200733 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200722 (Samples: BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes. These analytes were not detected. No variability is suspected. (Endrin aldehyde)

Instrument: Au-ecd4 05/17/12-1 (BB86389, BB86390, BB86391, BB86393, BB86394, BB86395)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/17/2012

QC (Batch Specific)

---------- Sample No: BB86098, QA/QC Batch: 200722 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Endrin aldehyde(34.6%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200732 (Samples: BB86389, BB86390, BB86391, BB86392, BB86393, BB86394, BB86395): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes. These analytes were not detected, therefore no variability is suspected. (Compounds listed below)

Instrument: Chem07 05/20/12-1 (BB86390)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/SV_0514):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Aniline, 4-chloroaniline, Hexachlorocyclopentadiene, 3-nitroaniline, 3,3'-dichlorobenzidine

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, Benzaldehyde, Aniline, 4-Chloroaniline, 3-Nitroaniline, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/20/2012

Instrument: Chem09 05/16/12-1 (BB86389)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, 3-Nitroaniline, Carbazole, 3,3'-dichlorobenzidine

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

Printed Name Damien Drobinski
Position: Chemist
Date: 5/16/2012

Instrument: Chem09 05/17/12-1 (BB86390, BB86391, BB86392, BB86393, BB86394, BB86395)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, Hexachlorocyclopentadiene, 3-Nitroaniline, Carbazole, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/17/2012

Instrument: Chem09 05/18/12-1 (BB86390)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, 2-Nitrophenol, Pentachloronitrobenzene, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/18/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

QC (Batch Specific)

---------- Sample No: BB86130, QA/QC Batch: 200732 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(24%), Pentachloronitrobenzene(146%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(14%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(52.6%)

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200997 (Samples: BB86389, BB86391, BB86393, BB86394): -----

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

QC Batch 201083 (Samples: BB86390): -----

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

Instrument: Chem03 05/16/12-2 (BB86392, BB86395, BB86396, BB86397)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/16/2012

Instrument: Chem03 05/17/12-1 (BB86389, BB86391, BB86393, BB86394)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/17/2012

Instrument: Chem03 05/18/12-1 (BB86390)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 23, 2012

SDG I.D.: GBB86389

QC (Batch Specific)

---------- Sample No: BB86812, QA/QC Batch: 201083 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Methyl ethyl ketone(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86919, QA/QC Batch: 200910 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86993, QA/QC Batch: 200997 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Methyl ethyl ketone(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary
Report to: Jane Witherell
Invoice to: CTDOT - DAS Contract c/o MGI

Project P.O:
Phone #: 8607249141
Fax #: 8607249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-15-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pest + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
86389	GP-6 1-3'	S	5-15-12	6:34am	X	X	X	X	X	X	X				3	2					
86390	GP-82 1-3'			7:21am																	
86391	GP-83 2-4'			9:45am																	
86392	GP-84 2-4'			10:31am																	
86393	GP-85 1-3'			8:11am																	
86394	GP-86 2-4'			11:43am																	
86395	GP-87 2-4'			12:24pm																	
86396	TB-13 - High			-																	
86397	TB - LOW																				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/16/12	9:30
[signature]	CParadise	5/16/12	1306

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Tuesday, May 22, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB85851 - BB85859

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	9:04
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85851

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-1 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/16/12		LK	6010
Arsenic	3.87	0.70	mg/Kg	05/16/12		LK	6010
Barium	90.8	0.35	mg/Kg	05/16/12		LK	6010
Cadmium	0.44	0.35	mg/Kg	05/16/12		LK	6010
Chromium	17.0	0.35	mg/Kg	05/16/12		LK	6010
Mercury	0.27	0.08	mg/Kg	05/16/12		RS	SW-7471
Lead	305	3.5	mg/Kg	05/17/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/16/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	0.015	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.243	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	0.027	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	0.0011	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	1.47	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	90		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		BS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-1 1-3 FT

Phoenix I.D.: BB85851

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	53		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	490	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	128		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	88		%	05/16/12		MH	30 - 150 %
% TCMX	98		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/17/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-1 1-3 FT

Phoenix I.D.: BB85851

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	73		%	05/17/12		KCA	30 - 150 %
% TCMX	96		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,1,1-Trichloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	2.9	ug/Kg	05/16/12		H/J	SW8260
1,1,2-Trichloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloroethene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloropropene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2,3-Trichloropropane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichloropropane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,3-Dichlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,3-Dichloropropane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
1,4-Dichlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
2,2-Dichloropropane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
2-Chlorotoluene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
2-Hexanone	ND	24	ug/Kg	05/16/12		H/J	SW8260
2-Isopropyltoluene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
4-Chlorotoluene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
4-Methyl-2-pentanone	ND	24	ug/Kg	05/16/12		H/J	SW8260
Acetone	ND	98	ug/Kg	05/16/12		H/J	SW8260
Acrylonitrile	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Benzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Bromobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Bromochloromethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Bromodichloromethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Bromoform	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Bromomethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Carbon Disulfide	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Carbon tetrachloride	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Chlorobenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Chloroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Chloroform	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Chloromethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Dibromochloromethane	ND	2.9	ug/Kg	05/16/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT Phoenix I.D.: BB85851
Client ID: GP-1 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Dibromomethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Dichlorodifluoromethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Ethylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Hexachlorobutadiene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Isopropylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
m&p-Xylene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Methyl Ethyl Ketone	ND	29	ug/Kg	05/16/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	9.8	ug/Kg	05/16/12		H/J	SW8260
Methylene chloride	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Naphthalene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
n-Butylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
n-Propylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
o-Xylene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
p-Isopropyltoluene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
sec-Butylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Styrene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
tert-Butylbenzene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Tetrachloroethene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	9.8	ug/Kg	05/16/12		H/J	SW8260
Toluene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Total Xylenes	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	9.8	ug/Kg	05/16/12		H/J	SW8260
Trichloroethene	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Trichlorofluoromethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Trichlorotrifluoroethane	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
Vinyl chloride	ND	4.9	ug/Kg	05/16/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	05/16/12		H/J	70 - 130 %
% Bromofluorobenzene	85		%	05/16/12		H/J	70 - 130 %
% Dibromofluoromethane	83		%	05/16/12		H/J	70 - 130 %
% Toluene-d8	100		%	05/16/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-1 1-3 FT

Phoenix I.D.: BB85851

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	720	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	720	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	1000	510	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Anthracene	680	510	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	720	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	2300	510	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	870	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	2600	510	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	5000	510	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	1300	510	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	1000	510	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	720	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	690	510	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/16/12		DD	SW 8270
Chrysene	2900	510	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	4900	510	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1200	510	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	720	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-1 1-3 FT

Phoenix I.D.: BB85851

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	720	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	720	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	720	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	1900	510	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/16/12		DD	SW 8270
Pyrene	4300	510	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	720	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	119		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	89		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	84		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	89		%	05/16/12		DD	15 - 130 %
% Phenol-d5	89		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	94		%	05/16/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	8:12
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85852

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-2 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	05/16/12		LK	6010
Arsenic	26.7	0.68	mg/Kg	05/16/12		LK	6010
Barium	66.8	0.34	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	05/16/12		LK	6010
Chromium	26.4	0.34	mg/Kg	05/16/12		LK	6010
Mercury	0.30	0.08	mg/Kg	05/16/12		RS	SW-7471
Lead	166	3.4	mg/Kg	05/17/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	0.012	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.035	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	0.090	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	92		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-2 1-3 FT

Phoenix I.D.: BB85852

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	45	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	45	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	45	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	450	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	45	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	90	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	45	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	90	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	400	21	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	120		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	820	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	95		%	05/16/12		MH	30 - 150 %
% TCMX	108		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	91	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.3	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	53	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	160	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.3	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	86		%	05/17/12		KCA	30 - 150 %
% TCMX	100		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	05/16/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/16/12		H/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/16/12		H/J	SW8260
Acetone	ND	100	ug/Kg	05/16/12		H/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Benzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Bromoform	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Bromomethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Chloroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Chloroform	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Chloromethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	05/16/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	05/16/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/16/12		H/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Naphthalene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
o-Xylene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Styrene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/16/12		H/J	SW8260
Toluene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/16/12		H/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	05/16/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/16/12		H/J	70 - 130 %
% Bromofluorobenzene	83		%	05/16/12		H/J	70 - 130 %
% Dibromofluoromethane	84		%	05/16/12		H/J	70 - 130 %
% Toluene-d8	100		%	05/16/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	570	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-2 1-3 FT

Phoenix I.D.: BB85852

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	570	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	570	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	360	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	570	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	1500	250	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Anthracene	1300	250	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	360	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	6400	250	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	430	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	6400	250	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	12000	250	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	1700	250	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	3100	250	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	360	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Carbazole	560	540	ug/Kg	05/16/12		DD	SW 8270
Chrysene	7700	250	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	740	250	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	10000	250	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	2000	250	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	350	250	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	360	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-2 1-3 FT

Phoenix I.D.: BB85852

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	360	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	360	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	360	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	2700	250	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	250	ug/Kg	05/16/12		DD	SW 8270
Pyrene	9200	250	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	360	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	104		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	85		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/16/12		DD	15 - 130 %
% Phenol-d5	85		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	66		%	05/16/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference caused by the presence of PCB's in the samples an elevated MDL was reported.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	6:55
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85853

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-3 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	05/16/12		LK	6010
Arsenic	1.43	0.68	mg/Kg	05/16/12		LK	6010
Barium	70.7	0.34	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	05/16/12		LK	6010
Chromium	18.8	0.34	mg/Kg	05/16/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	05/16/12		RS	SW-7471
Lead	9.18	0.34	mg/Kg	05/16/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/16/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.031	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	95		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-3 1-3 FT

Phoenix I.D.: BB85853

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	58		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/16/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/16/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	94		%	05/16/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	92		%	05/16/12		MH	30 - 150 %
% TCMX	97		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	52	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.2	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	90		%	05/17/12		KCA	30 - 150 %
% TCMX	99		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/16/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	94		%	05/16/12		R/J	70 - 130 %
% Dibromofluoromethane	101		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/16/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-3 1-3 FT

Phoenix I.D.: BB85853

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	300	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	380	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	05/16/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-3 1-3 FT

Phoenix I.D.: BB85853

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	112		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	82		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	95		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	85		%	05/16/12		DD	15 - 130 %
% Phenol-d5	94		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	66		%	05/16/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	10:11
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85854

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-4 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/16/12		LK	6010
Arsenic	2.18	0.70	mg/Kg	05/16/12		LK	6010
Barium	68.2	0.35	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.35	0.35	mg/Kg	05/16/12		LK	6010
Chromium	19.5	0.35	mg/Kg	05/16/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	05/16/12		RS	SW-7471
Lead	10.9	0.35	mg/Kg	05/16/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/16/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.042	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	0.011	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	95		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-4 2-4 FT

Phoenix I.D.: BB85854

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	58		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/16/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/16/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	76		%	05/16/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	86		%	05/16/12		MH	30 - 150 %
% TCMX	95		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	33	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	33	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	52	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	33	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	33	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	33	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	33	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	33	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.2	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	87		%	05/17/12		KCA	30 - 150 %
% TCMX	99		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	23	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
4-Methyl-2-pentanone	ND	23	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	93	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	2.8	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-4 2-4 FT

Phoenix I.D.: BB85854

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	28	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	9.3	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	9.3	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	9.3	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	4.6	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	97		%	05/16/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	103		%	05/16/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-4 2-4 FT

Phoenix I.D.: BB85854

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	250	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	05/16/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-4 2-4 FT

Phoenix I.D.: BB85854

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	113		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	81		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	93		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	85		%	05/16/12		DD	15 - 130 %
% Phenol-d5	92		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	65		%	05/16/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	12:01
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85855

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-5 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/16/12		LK	6010
Arsenic	1.54	0.69	mg/Kg	05/16/12		LK	6010
Barium	53.8	0.35	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.35	0.35	mg/Kg	05/16/12		LK	6010
Chromium	16.3	0.35	mg/Kg	05/16/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	05/16/12		RS	SW-7471
Lead	5.50	0.35	mg/Kg	05/16/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/16/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.052	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	95		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-5 1-3 FT

Phoenix I.D.: BB85855

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	30		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/16/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/16/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	77		%	05/16/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	87		%	05/16/12		MH	30 - 150 %
% TCMX	100		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	52	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	5.2	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.2	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	77		%	05/17/12		KCA	30 - 150 %
% TCMX	97		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	27	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT Phoenix I.D.: BB85855
Client ID: GP-5 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	97		%	05/16/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	102		%	05/16/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-5 1-3 FT

Phoenix I.D.: BB85855

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	05/16/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-5 1-3 FT

Phoenix I.D.: BB85855

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/16/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/16/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/16/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/16/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	05/16/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	05/16/12		DD	15 - 130 %
% 2-Fluorobiphenyl	63		%	05/16/12		DD	15 - 130 %
% 2-Fluorophenol	76		%	05/16/12		DD	15 - 130 %
% Nitrobenzene-d5	69		%	05/16/12		DD	15 - 130 %
% Phenol-d5	72		%	05/16/12		DD	15 - 130 %
% Terphenyl-d14	52		%	05/16/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	13:24
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85856

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-7 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	05/16/12		LK	6010
Arsenic	32.3	0.78	mg/Kg	05/16/12		LK	6010
Barium	64.0	0.39	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.39	0.39	mg/Kg	05/16/12		LK	6010
Chromium	28.9	0.39	mg/Kg	05/16/12		LK	6010
Mercury	0.41	0.08	mg/Kg	05/16/12		RS	SW-7471
Lead	189	3.9	mg/Kg	05/17/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	0.011	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.027	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	0.085	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	89		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-7 2-4 FT

Phoenix I.D.: BB85856

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	93	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	93	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	57		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	900	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Interference		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	700	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	78		%	05/16/12		MH	30 - 150 %
% TCMX	83		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	71	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	120	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	101		%	05/17/12		KCA	30 - 150 %
% TCMX	80		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	120	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-7 2-4 FT

Phoenix I.D.: BB85856

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	76		%	05/16/12		R/J	70 - 130 %
% Dibromofluoromethane	111		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	93		%	05/16/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	520	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	520	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	520	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	520	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-7 2-4 FT

Phoenix I.D.: BB85856

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	520	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	520	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	740	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	520	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	520	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	520	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	3200	520	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	520	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Anthracene	3500	520	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	740	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	12000	520	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	890	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	14000	520	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	25000	520	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	4200	520	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	7100	520	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	740	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Carbazole	1600	1100	ug/Kg	05/16/12		DD	SW 8270
Chrysene	16000	520	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	1700	520	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	520	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	520	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	20000	520	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	520	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	520	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	520	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	520	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	4800	520	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	520	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	690	520	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	520	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	740	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-7 2-4 FT

Phoenix I.D.: BB85856

Parameter	Result	RL	Units	Date	Time	By	Reference	
N-Nitrosodi-n-propylamine	ND	520	ug/Kg	05/16/12		DD	SW 8270	
N-Nitrosodiphenylamine	ND	740	ug/Kg	05/16/12		DD	SW 8270	
Pentachloronitrobenzene	ND	740	ug/Kg	05/16/12		DD	SW 8270	
Pentachlorophenol	ND	740	ug/Kg	05/16/12		DD	SW 8270	
Phenanthrene	6500	520	ug/Kg	05/16/12		DD	SW 8270	
Phenol	ND	520	ug/Kg	05/16/12		DD	SW 8270	
Pyrene	18000	520	ug/Kg	05/16/12		DD	SW 8270	
Pyridine	ND	740	ug/Kg	05/16/12		DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	149		%	05/16/12		DD	15 - 130 %	3
% 2-Fluorobiphenyl	93		%	05/16/12		DD	15 - 130 %	
% 2-Fluorophenol	108		%	05/16/12		DD	15 - 130 %	
% Nitrobenzene-d5	104		%	05/16/12		DD	15 - 130 %	
% Phenol-d5	103		%	05/16/12		DD	15 - 130 %	
% Terphenyl-d14	84		%	05/16/12		DD	15 - 130 %	

3 = This parameter exceeds laboratory specified limits.

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

* For Pesticides, due to matrix interference caused by the presence of PCB's in the samples an elevated MDL was reported.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	14:55
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85857

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-8 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	05/16/12		LK	6010
Arsenic	39.5	0.67	mg/Kg	05/16/12		LK	6010
Barium	139	0.33	mg/Kg	05/16/12		LK	6010
Cadmium	< 0.33	0.33	mg/Kg	05/16/12		LK	6010
Chromium	40.1	0.33	mg/Kg	05/16/12		LK	6010
Mercury	0.59	0.09	mg/Kg	05/16/12		RS	SW-7471
Lead	300	3.3	mg/Kg	05/17/12		EK	6010
Selenium	< 1.3	1.3	mg/Kg	05/17/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/16/12		EK	6010
SPLP Arsenic	0.033	0.004	mg/L	05/16/12		EK	6010
SPLP Barium	0.057	0.010	mg/L	05/16/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/16/12		EK	6010
SPLP Chromium	0.015	0.010	mg/L	05/16/12		EK	6010
SPLP Mercury	0.0006	0.0004	mg/L	05/16/12		RS	1312/SW7470
SPLP Lead	0.280	0.010	mg/L	05/16/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/16/12		EK	6010
Total Metals Digest	Completed			05/15/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/16/12		X/X	SW846-3005
Percent Solid	90		%	05/15/12		JL	E160.3
Soil Extraction for PCB	Completed			05/15/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/15/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/15/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/15/12		NS/F	3545
Mercury Digestion	Completed			05/16/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/15/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/16/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/15/12		X	EPA 1312
Field Extraction	Completed			05/14/12		MAG	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-8 2-4 FT

Phoenix I.D.: BB85857

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/16/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/16/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/16/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/16/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/16/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/16/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	56		%	05/16/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	750	22	mg/Kg	05/18/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	126		%	05/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1260	1200	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/16/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/16/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	89		%	05/16/12		MH	30 - 150 %
% TCMX	120		%	05/16/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/17/12		KCA	SW8081
4,4' -DDT	ND	130	ug/Kg	05/17/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/17/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/17/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/17/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/17/12		KCA	SW8081
Dieldrin	ND	250	ug/Kg	05/17/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/17/12		KCA	SW8081
Endosulfan II	ND	44	ug/Kg	05/17/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin	ND	41	ug/Kg	05/17/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/17/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/17/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/17/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/17/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/17/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/17/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/17/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	111		%	05/17/12		KCA	30 - 150 %
% TCMX	104		%	05/17/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-8 2-4 FT

Phoenix I.D.: BB85857

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	109		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	74		%	05/16/12		R/J	70 - 130 %
% Dibromofluoromethane	108		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	92		%	05/16/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
1,2-Dichlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
1,3-Dichlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
1,4-Dichlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,4-Dichlorophenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,4-Dimethylphenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrophenol	ND	3000	ug/Kg	05/16/12		DD	SW 8270
2,4-Dinitrotoluene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2,6-Dinitrotoluene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2-Chloronaphthalene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2-Chlorophenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2-Methylnaphthalene	ND	1300	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-8 2-4 FT

Phoenix I.D.: BB85857

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	1300	ug/Kg	05/16/12		DD	SW 8270
2-Nitroaniline	ND	3000	ug/Kg	05/16/12		DD	SW 8270
2-Nitrophenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	1800	ug/Kg	05/16/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	1300	ug/Kg	05/16/12		DD	SW 8270
3-Nitroaniline	ND	3000	ug/Kg	05/16/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	5400	ug/Kg	05/16/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	1800	ug/Kg	05/16/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270
4-Chloroaniline	ND	1300	ug/Kg	05/16/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	1300	ug/Kg	05/16/12		DD	SW 8270
4-Nitroaniline	ND	3000	ug/Kg	05/16/12		DD	SW 8270
4-Nitrophenol	ND	5400	ug/Kg	05/16/12		DD	SW 8270
Acenaphthene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Acenaphthylene	3800	1300	ug/Kg	05/16/12		DD	SW 8270
Acetophenone	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Aniline	ND	5400	ug/Kg	05/16/12		DD	SW 8270
Anthracene	3500	1300	ug/Kg	05/16/12		DD	SW 8270
Azobenzene	ND	1800	ug/Kg	05/16/12		DD	SW 8270
Benz(a)anthracene	13000	1300	ug/Kg	05/16/12		DD	SW 8270
Benzidine	ND	2200	ug/Kg	05/16/12		DD	SW 8270
Benzo(a)pyrene	12000	1300	ug/Kg	05/16/12		DD	SW 8270
Benzo(b)fluoranthene	26000	1300	ug/Kg	05/16/12		DD	SW 8270
Benzo(ghi)perylene	3600	1300	ug/Kg	05/16/12		DD	SW 8270
Benzo(k)fluoranthene	7300	1300	ug/Kg	05/16/12		DD	SW 8270
Benzoic acid	ND	5400	ug/Kg	05/16/12		DD	SW 8270
Benzyl butyl phthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	1800	ug/Kg	05/16/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Carbazole	ND	2800	ug/Kg	05/16/12		DD	SW 8270
Chrysene	16000	1300	ug/Kg	05/16/12		DD	SW 8270
Dibenz(a,h)anthracene	1500	1300	ug/Kg	05/16/12		DD	SW 8270
Dibenzofuran	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Diethyl phthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Dimethylphthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Di-n-butylphthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Di-n-octylphthalate	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Fluoranthene	18000	1300	ug/Kg	05/16/12		DD	SW 8270
Fluorene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Hexachlorobutadiene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Hexachloroethane	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	4000	1300	ug/Kg	05/16/12		DD	SW 8270
Isophorone	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Naphthalene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
Nitrobenzene	ND	1300	ug/Kg	05/16/12		DD	SW 8270
N-Nitrosodimethylamine	ND	1800	ug/Kg	05/16/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB85857

Client ID: GP-8 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference	
N-Nitrosodi-n-propylamine	ND	1300	ug/Kg	05/16/12		DD	SW 8270	
N-Nitrosodiphenylamine	ND	1800	ug/Kg	05/16/12		DD	SW 8270	
Pentachloronitrobenzene	ND	1800	ug/Kg	05/16/12		DD	SW 8270	
Pentachlorophenol	ND	1800	ug/Kg	05/16/12		DD	SW 8270	
Phenanthrene	5800	1300	ug/Kg	05/16/12		DD	SW 8270	
Phenol	ND	1300	ug/Kg	05/16/12		DD	SW 8270	
Pyrene	17000	1300	ug/Kg	05/16/12		DD	SW 8270	
Pyridine	ND	1800	ug/Kg	05/16/12		DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	132		%	05/16/12		DD	15 - 130 %	3
% 2-Fluorobiphenyl	101		%	05/16/12		DD	15 - 130 %	
% 2-Fluorophenol	111		%	05/16/12		DD	15 - 130 %	
% Nitrobenzene-d5	100		%	05/16/12		DD	15 - 130 %	
% Phenol-d5	102		%	05/16/12		DD	15 - 130 %	
% Terphenyl-d14	94		%	05/16/12		DD	15 - 130 %	

3 = This parameter exceeds laboratory specified limits.

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

* For Pesticides, due to matrix interference caused by the presence of PCB's in the samples an elevated MDL was reported.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85858

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-12 LOW

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			05/14/12		MAG	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	25	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-12 LOW

Phoenix I.D.: BB85858

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	100	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	05/16/12		R/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	96		%	05/16/12		R/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB85858

Client ID: TB-12 LOW

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	94		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/16/12		R/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 22, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/14/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/15/12	14:44
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB85851
Phoenix ID: BB85859

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-HIGH

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			05/14/12		MAG	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1,1-Trichloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1,2-Trichloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloroethene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,1-Dichloropropene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2,3-Trichloropropane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,2-Dichloropropane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,3-Dichloropropane	ND	250	ug/Kg	05/16/12		R/J	SW8260
1,4-Dichlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
2,2-Dichloropropane	ND	250	ug/Kg	05/16/12		R/J	SW8260
2-Chlorotoluene	ND	250	ug/Kg	05/16/12		R/J	SW8260
2-Hexanone	ND	1300	ug/Kg	05/16/12		R/J	SW8260
2-Isopropyltoluene	ND	250	ug/Kg	05/16/12		R/J	SW8260
4-Chlorotoluene	ND	250	ug/Kg	05/16/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-HIGH

Phoenix I.D.: BB85859

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	1300	ug/Kg	05/16/12		R/J	SW8260
Acetone	ND	5000	ug/Kg	05/16/12		R/J	SW8260
Acrylonitrile	ND	500	ug/Kg	05/16/12		R/J	SW8260
Benzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Bromobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Bromochloromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Bromodichloromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Bromoform	ND	250	ug/Kg	05/16/12		R/J	SW8260
Bromomethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Carbon Disulfide	ND	250	ug/Kg	05/16/12		R/J	SW8260
Carbon tetrachloride	ND	250	ug/Kg	05/16/12		R/J	SW8260
Chlorobenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Chloroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Chloroform	ND	250	ug/Kg	05/16/12		R/J	SW8260
Chloromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	250	ug/Kg	05/16/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Dibromochloromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Dibromoethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Dibromomethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Dichlorodifluoromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Ethylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Hexachlorobutadiene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Isopropylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
m&p-Xylene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Methyl Ethyl Ketone	ND	3000	ug/Kg	05/16/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	05/16/12		R/J	SW8260
Methylene chloride	ND	500	ug/Kg	05/16/12		R/J	SW8260
Naphthalene	ND	250	ug/Kg	05/16/12		R/J	SW8260
n-Butylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
n-Propylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
o-Xylene	ND	250	ug/Kg	05/16/12		R/J	SW8260
p-Isopropyltoluene	ND	250	ug/Kg	05/16/12		R/J	SW8260
sec-Butylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Styrene	ND	250	ug/Kg	05/16/12		R/J	SW8260
tert-Butylbenzene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Tetrachloroethene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	500	ug/Kg	05/16/12		R/J	SW8260
Toluene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Total Xylenes	ND	250	ug/Kg	05/16/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	250	ug/Kg	05/16/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	250	ug/Kg	05/16/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	05/16/12		R/J	SW8260
Trichloroethene	ND	250	ug/Kg	05/16/12		R/J	SW8260
Trichlorofluoromethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Trichlorotrifluoroethane	ND	250	ug/Kg	05/16/12		R/J	SW8260
Vinyl chloride	ND	250	ug/Kg	05/16/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/16/12		R/J	70 - 130 %
% Bromofluorobenzene	97		%	05/16/12		R/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB85859

Client ID: TB-HIGH

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	98		%	05/16/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/16/12		R/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 22, 2012

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 22, 2012

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200438, QC Sample No: BB61252 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)												
ICP Metals - SPLP Extraction												
Arsenic	BDL	<0.004	<0.004	NC	102	102	0.0	103	103	0.0	75 - 125	20
Barium	BDL	<0.010	<0.010	NC	99.6	99.8	0.2	100	100	0.0	75 - 125	20
Cadmium	BDL	<0.005	<0.005	NC	103	104	1.0	105	104	1.0	75 - 125	20
Chromium	BDL	<0.010	<0.010	NC	98.3	99.2	0.9	100	99.8	0.2	75 - 125	20
Lead	BDL	<0.010	<0.010	NC	98.7	99.6	0.9	101	100	1.0	75 - 125	20
Selenium	BDL	0.021	0.027	NC	96.3	96.1	0.2	95.3	95.3	0.0	75 - 125	20
Silver	BDL	<0.010	<0.010	NC	96.0	96.7	0.7	97.9	98.0	0.1	75 - 125	20
QA/QC Batch 200650, QC Sample No: BB85594 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)												
ICP Metals - Soil												
Arsenic	BDL	3.38	3.04	NC	84.8	86.1	1.5	93.4	95.5	2.2	75 - 125	30
Barium	BDL	46.8	42.4	9.90	90.1	89.0	1.2	97.0	99.0	2.0	75 - 125	30
Cadmium	BDL	<0.37	<0.34	NC	82.3	85.0	3.2	94.9	96.5	1.7	75 - 125	30
Chromium	BDL	22.0	21.4	2.80	86.4	86.4	0.0	97.0	98.2	1.2	75 - 125	30
Lead	BDL	5.58	5.64	1.10	86.8	87.9	1.3	94.2	97.1	3.0	75 - 125	30
Selenium	BDL	<1.5	<1.4	NC	85.7	86.0	0.3	83.6	85.3	2.0	75 - 125	30
Silver	BDL	<0.37	<0.34	NC	86.1	92.0	6.6	97.7	99.5	1.8	75 - 125	30
QA/QC Batch 200759, QC Sample No: BB85742 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	116	113	2.6	111	113	1.8	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200758, QC Sample No: BB85853 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)												
Mercury - Soil	BDL	<0.07	<0.08	NC	105	107	1.9	106	105	0.9	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 22, 2012

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 200569, QC Sample No: BB85112 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	76	59	25.2	66	68	3.0	40 - 140	30	
2,4,5-TP (Silvex)	ND	80	68	16.2	76	79	3.9	40 - 140	30	
2,4-D	ND	67	59	12.7	78	65	18.2	40 - 140	30	
2,4-DB	ND	74	61	19.3	69	66	4.4	40 - 140	30	
Dalapon	ND	66	52	23.7	18	20	10.5	40 - 140	30	m
Dicamba	ND	84	73	14.0	71	73	2.8	40 - 140	30	
Dichloroprop	ND	74	66	11.4	57	66	14.6	40 - 140	30	
Dinoseb	ND	76	69	9.7	74	77	4.0	40 - 140	30	
% DCAA (Surrogate Rec)	65	72	64	11.8	66	69	4.4	30 - 150	30	
QA/QC Batch 200628, QC Sample No: BB85516 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)										
Pesticides - Soil										
4,4' -DDD	ND	77	74	4.0	87	89	2.3	40 - 140	30	
4,4' -DDE	ND	79	76	3.9	85	88	3.5	40 - 140	30	
4,4' -DDT	ND	84	80	4.9	91	91	0.0	40 - 140	30	
a-BHC	ND	83	78	6.2	85	89	4.6	40 - 140	30	
a-Chlordane	ND	79	75	5.2	81	83	2.4	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	82	77	6.3	84	85	1.2	40 - 140	30	
b-BHC	ND	77	77	0.0	83	86	3.6	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	84	80	4.9	87	89	2.3	40 - 140	30	
Dieldrin	ND	82	78	5.0	86	87	1.2	40 - 140	30	
Endosulfan I	ND	79	76	3.9	84	85	1.2	40 - 140	30	
Endosulfan II	ND	72	70	2.8	86	85	1.2	40 - 140	30	
Endosulfan sulfate	ND	78	75	3.9	84	86	2.4	40 - 140	30	
Endrin	ND	81	76	6.4	86	90	4.5	40 - 140	30	
Endrin aldehyde	ND	68	71	4.3	87	86	1.2	40 - 140	30	
Endrin ketone	ND	89	87	2.3	92	92	0.0	40 - 140	30	
g-BHC	ND	81	77	5.1	86	90	4.5	40 - 140	30	
g-Chlordane	ND	80	76	5.1	82	83	1.2	40 - 140	30	
Heptachlor	ND	81	77	5.1	84	87	3.5	40 - 140	30	
Heptachlor epoxide	ND	80	76	5.1	81	82	1.2	40 - 140	30	
Methoxychlor	ND	85	82	3.6	99	98	1.0	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	92	91	91	0.0	91	94	3.2	30 - 150	30	
% TCMX	93	92	88	4.4	92	95	3.2	30 - 150	30	
QA/QC Batch 200647, QC Sample No: BB85665 (BB85851)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	65	67	3.0	91	66	31.8	50 - 150	30	r
% n-Pentacosane	80	90	90	0.0	125	92	30.4	50 - 150	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 200716, QC Sample No: BB85853 (BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	67	68	1.5	69	57	19.0	50 - 150	30	
% n-Pentacosane	72	83	78	6.2	95	80	17.1	50 - 150	30	
QA/QC Batch 200803, QC Sample No: BB86085 (BB85853, BB85854, BB85855)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	102	106	3.8	89	94	5.5	70 - 130	30	
1,1,1-Trichloroethane	ND	111	110	0.9	100	97	3.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	98	106	7.8	88	95	7.7	70 - 130	30	
1,1,2-Trichloroethane	ND	103	107	3.8	88	94	6.6	70 - 130	30	
1,1-Dichloroethane	ND	99	97	2.0	90	85	5.7	70 - 130	30	
1,1-Dichloroethene	ND	109	112	2.7	109	102	6.6	70 - 130	30	
1,1-Dichloropropene	ND	104	102	1.9	94	94	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	108	102	5.7	78	78	0.0	70 - 130	30	
1,2,3-Trichloropropane	ND	88	110	22.2	85	97	13.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	104	99	4.9	77	78	1.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	103	1.0	86	88	2.3	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	100	105	4.9	85	95	11.1	70 - 130	30	
1,2-Dichlorobenzene	ND	98	99	1.0	84	87	3.5	70 - 130	30	
1,2-Dichloroethane	ND	101	104	2.9	89	93	4.4	70 - 130	30	
1,2-Dichloropropane	ND	107	106	0.9	94	97	3.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	103	103	0.0	88	90	2.2	70 - 130	30	
1,3-Dichlorobenzene	ND	100	100	0.0	85	87	2.3	70 - 130	30	
1,3-Dichloropropane	ND	100	107	6.8	88	94	6.6	70 - 130	30	
1,4-Dichlorobenzene	ND	98	97	1.0	83	85	2.4	70 - 130	30	
2,2-Dichloropropane	ND	112	110	1.8	96	90	6.5	70 - 130	30	
2-Chlorotoluene	ND	102	102	0.0	89	90	1.1	70 - 130	30	
2-Hexanone	ND	99	117	16.7	55	66	18.2	70 - 130	30	m
2-Isopropyltoluene	ND	100	99	1.0	94	93	1.1	70 - 130	30	
4-Chlorotoluene	ND	98	98	0.0	86	88	2.3	70 - 130	30	
4-Methyl-2-pentanone	ND	104	111	6.5	83	92	10.3	70 - 130	30	
Acetone	ND	108	121	11.4	69	78	12.2	70 - 130	30	m
Acrylonitrile	ND	94	96	2.1	85	86	1.2	70 - 130	30	
Benzene	ND	107	107	0.0	94	94	0.0	70 - 130	30	
Bromobenzene	ND	103	105	1.9	82	84	2.4	70 - 130	30	
Bromochloromethane	ND	101	107	5.8	93	96	3.2	70 - 130	30	
Bromodichloromethane	ND	106	108	1.9	92	97	5.3	70 - 130	30	
Bromoform	ND	107	115	7.2	86	97	12.0	70 - 130	30	
Bromomethane	ND	90	97	7.5	88	94	6.6	70 - 130	30	
Carbon Disulfide	ND	113	120	6.0	114	110	3.6	70 - 130	30	
Carbon tetrachloride	ND	101	104	2.9	89	94	5.5	70 - 130	30	
Chlorobenzene	ND	98	100	2.0	86	87	1.2	70 - 130	30	
Chloroethane	ND	113	125	10.1	118	121	2.5	70 - 130	30	
Chloroform	ND	113	111	1.8	99	98	1.0	70 - 130	30	
Chloromethane	ND	114	110	3.6	117	107	8.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	112	110	1.8	100	96	4.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	102	103	1.0	89	92	3.3	70 - 130	30	
Dibromochloromethane	ND	99	108	8.7	86	93	7.8	70 - 130	30	
Dibromoethane	ND	100	105	4.9	86	94	8.9	70 - 130	30	
Dibromomethane	ND	102	105	2.9	88	94	6.6	70 - 130	30	
Dichlorodifluoromethane	ND	114	109	4.5	118	115	2.6	70 - 130	30	
Ethylbenzene	ND	101	102	1.0	87	87	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Hexachlorobutadiene	ND	101	94	7.2	79	74	6.5	70 - 130	30	
Isopropylbenzene	ND	101	102	1.0	89	89	0.0	70 - 130	30	
m&p-Xylene	ND	100	100	0.0	88	88	0.0	70 - 130	30	
Methyl ethyl ketone	ND	106	121	13.2	66	78	16.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	113	91	21.6	107	85	22.9	70 - 130	30	
Methylene chloride	ND	102	104	1.9	103	95	8.1	70 - 130	30	
Naphthalene	ND	116	97	17.8	70	67	4.4	70 - 130	30	m
n-Butylbenzene	ND	107	104	2.8	84	83	1.2	70 - 130	30	
n-Propylbenzene	ND	98	98	0.0	87	87	0.0	70 - 130	30	
o-Xylene	ND	99	100	1.0	90	91	1.1	70 - 130	30	
p-Isopropyltoluene	ND	105	104	1.0	86	86	0.0	70 - 130	30	
sec-Butylbenzene	ND	100	99	1.0	88	88	0.0	70 - 130	30	
Styrene	ND	102	102	0.0	86	86	0.0	70 - 130	30	
tert-Butylbenzene	ND	100	100	0.0	90	90	0.0	70 - 130	30	
Tetrachloroethene	ND	98	99	1.0	87	91	4.5	70 - 130	30	
Tetrahydrofuran (THF)	ND	108	114	5.4	98	102	4.0	70 - 130	30	
Toluene	ND	106	103	2.9	91	91	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	124	96	25.5	119	86	32.2	70 - 130	30	r
trans-1,3-Dichloropropene	ND	103	104	1.0	87	91	4.5	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	106	108	1.9	82	91	10.4	70 - 130	30	
Trichloroethene	ND	104	103	1.0	91	93	2.2	70 - 130	30	
Trichlorofluoromethane	ND	119	120	0.8	109	105	3.7	70 - 130	30	
Trichlorotrifluoroethane	ND	111	112	0.9	112	104	7.4	70 - 130	30	
Vinyl chloride	ND	122	112	8.5	116	104	10.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	99	101	2.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	99	101	102	1.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	98	100	103	3.0	97	99	2.0	70 - 130	30	
% Toluene-d8	104	101	100	1.0	101	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200715, QC Sample No: BB86098 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	84	87	3.5	107	105	1.9	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	76	85	11.2	117	122	4.2	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	93	83	94	12.4	99	96	3.1	30 - 150	30	
% TCMX (Surrogate Rec)	82	78	79	1.3	83	85	2.4	30 - 150	30	

QA/QC Batch 200724, QC Sample No: BB86099 (BB85857)

Chlorinated Herbicides - Soil

2,4,5-T	ND	61	60	1.7	52	75	36.2	40 - 140	30	r
2,4,5-TP (Silvex)	ND	64	63	1.6	55	62	12.0	40 - 140	30	
2,4-D	ND	72	67	7.2	61	69	12.3	40 - 140	30	
2,4-DB	ND	63	59	6.6	59	66	11.2	40 - 140	30	
Dalapon	ND	62	58	6.7	45	51	12.5	40 - 140	30	
Dicamba	ND	63	64	1.6	54	67	21.5	40 - 140	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dichloroprop	ND	56	56	0.0	50	55	9.5	40 - 140	30	
Dinoseb	ND	65	57	13.1	60	64	6.5	40 - 140	30	
% DCAA (Surrogate Rec)	63	51	50	2.0	45	49	8.5	30 - 150	30	

QA/QC Batch 200712, QC Sample No: BB86101 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	87	87	0.0	91	89	2.2	30 - 130	30	
1,2,4-Trichlorobenzene	ND	77	76	1.3	81	81	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	74	74	0.0	78	78	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	70	70	0.0	74	73	1.4	30 - 130	30	
1,4-Dichlorobenzene	ND	71	70	1.4	74	74	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	94	95	1.1	89	87	2.3	30 - 130	30	
2,4,6-Trichlorophenol	ND	92	91	1.1	81	81	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	91	92	1.1	91	91	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	59	59	0.0	68	68	0.0	30 - 130	30	
2,4-Dinitrophenol	ND	23	22	4.4	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	95	95	0.0	94	93	1.1	30 - 130	30	
2,6-Dinitrotoluene	ND	90	89	1.1	90	92	2.2	30 - 130	30	
2-Chloronaphthalene	ND	83	83	0.0	86	87	1.2	30 - 130	30	
2-Chlorophenol	ND	77	78	1.3	79	80	1.3	30 - 130	30	
2-Methylnaphthalene	ND	83	82	1.2	86	86	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	84	84	0.0	88	88	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	77	76	1.3	72	71	1.4	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	80	81	1.2	84	82	2.4	30 - 130	30	
3,3'-Dichlorobenzidine	ND	148	149	0.7	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4,6-Dinitro-2-methylphenol	ND	88	86	2.3	<5	<5	NC	30 - 130	30	m
4-Bromophenyl phenyl ether	ND	87	86	1.2	90	91	1.1	30 - 130	30	
4-Chloro-3-methylphenol	ND	92	93	1.1	93	92	1.1	30 - 130	30	
4-Chloroaniline	ND	139	147	5.6	138	143	3.6	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	95	95	0.0	97	97	0.0	30 - 130	30	
4-Nitroaniline	ND	83	83	0.0	82	83	1.2	30 - 130	30	
4-Nitrophenol	ND	88	86	2.3	20	20	0.0	30 - 130	30	m
Acenaphthene	ND	87	88	1.1	91	91	0.0	30 - 130	30	
Acenaphthylene	ND	86	85	1.2	89	89	0.0	30 - 130	30	
Acetophenone	ND	77	77	0.0	79	78	1.3	30 - 130	30	
Aniline	ND	129	131	1.5	129	132	2.3	30 - 130	30	l,m
Anthracene	ND	90	90	0.0	93	94	1.1	30 - 130	30	
Azobenzene	ND	77	78	1.3	78	78	0.0	30 - 130	30	
Benz(a)anthracene	ND	86	86	0.0	87	87	0.0	30 - 130	30	
Benzidine	ND	54	65	18.5	81	101	22.0	30 - 130	30	
Benzo(a)pyrene	ND	84	85	1.2	90	90	0.0	30 - 130	30	
Benzo(b)fluoranthene	ND	92	93	1.1	93	96	3.2	30 - 130	30	
Benzo(ghi)perylene	ND	95	95	0.0	100	100	0.0	30 - 130	30	
Benzo(k)fluoranthene	ND	88	90	2.2	94	88	6.6	30 - 130	30	
Benzyl butyl phthalate	ND	79	79	0.0	81	85	4.8	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	78	79	1.3	81	81	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	72	72	0.0	76	75	1.3	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	66	67	1.5	70	70	0.0	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	77	76	1.3	79	80	1.3	30 - 130	30	
Carbazole	ND	122	122	0.0	134	135	0.7	30 - 130	30	m
Chrysene	ND	86	85	1.2	89	91	2.2	30 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibenz(a,h)anthracene	ND	98	99	1.0	100	102	2.0	30 - 130	30	
Dibenzofuran	ND	91	90	1.1	93	93	0.0	30 - 130	30	
Diethyl phthalate	ND	87	87	0.0	89	88	1.1	30 - 130	30	
Dimethylphthalate	ND	87	87	0.0	88	88	0.0	30 - 130	30	
Di-n-butylphthalate	ND	82	81	1.2	83	83	0.0	30 - 130	30	
Di-n-octylphthalate	ND	87	87	0.0	85	83	2.4	30 - 130	30	
Fluoranthene	ND	88	89	1.1	86	89	3.4	30 - 130	30	
Fluorene	ND	94	93	1.1	96	96	0.0	30 - 130	30	
Hexachlorobenzene	ND	76	76	0.0	79	79	0.0	30 - 130	30	
Hexachlorobutadiene	ND	80	80	0.0	85	84	1.2	30 - 130	30	
Hexachlorocyclopentadiene	ND	92	95	3.2	68	53	24.8	30 - 130	30	
Hexachloroethane	ND	70	70	0.0	72	72	0.0	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	95	96	1.0	99	101	2.0	30 - 130	30	
Isophorone	ND	77	77	0.0	78	78	0.0	30 - 130	30	
Naphthalene	ND	80	80	0.0	83	83	0.0	30 - 130	30	
Nitrobenzene	ND	71	71	0.0	72	71	1.4	30 - 130	30	
N-Nitrosodimethylamine	ND	59	60	1.7	61	60	1.7	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	74	74	0.0	75	74	1.3	30 - 130	30	
N-Nitrosodiphenylamine	ND	120	120	0.0	120	120	0.0	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	102	103	1.0	48	47	2.1	30 - 130	30	
Phenanthrene	ND	91	89	2.2	86	87	1.2	30 - 130	30	
Phenol	ND	87	87	0.0	89	88	1.1	30 - 130	30	
Pyrene	ND	93	92	1.1	92	94	2.2	30 - 130	30	
Pyridine	ND	49	49	0.0	51	51	0.0	30 - 130	30	
% 2,4,6-Tribromophenol	65	77	77	0.0	68	67	1.5	15 - 130	30	
% 2-Fluorobiphenyl	72	79	79	0.0	81	82	1.2	30 - 130	30	
% 2-Fluorophenol	73	77	77	0.0	77	76	1.3	15 - 130	30	
% Nitrobenzene-d5	69	72	72	0.0	74	73	1.4	30 - 130	30	
% Phenol-d5	75	79	80	1.3	82	81	1.2	15 - 130	30	
% Terphenyl-d14	81	92	92	0.0	95	98	3.1	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 200808, QC Sample No: BB86108 (BB85851, BB85852)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	100	98	2.0	82	85	3.6	70 - 130	30	
1,1,1-Trichloroethane	ND	93	92	1.1	80	84	4.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	96	93	3.2	86	86	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	104	101	2.9	81	83	2.4	70 - 130	30	
1,1-Dichloroethane	ND	92	89	3.3	78	79	1.3	70 - 130	30	
1,1-Dichloroethene	ND	96	95	1.0	81	84	3.6	70 - 130	30	
1,1-Dichloropropene	ND	95	95	0.0	84	87	3.5	70 - 130	30	
1,2,3-Trichlorobenzene	ND	96	98	2.1	53	62	15.7	70 - 130	30	m
1,2,3-Trichloropropane	ND	98	94	4.2	81	80	1.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	88	92	4.4	53	59	10.7	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	95	96	1.0	54	62	13.8	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	101	103	2.0	74	78	5.3	70 - 130	30	
1,2-Dichlorobenzene	ND	93	95	2.1	61	68	10.9	70 - 130	30	m
1,2-Dichloroethane	ND	102	99	3.0	84	85	1.2	70 - 130	30	
1,2-Dichloropropane	ND	102	99	3.0	84	85	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	97	98	1.0	69	74	7.0	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3-Dichlorobenzene	ND	94	95	1.1	75	80	6.5	70 - 130	30	
1,3-Dichloropropane	ND	100	97	3.0	82	83	1.2	70 - 130	30	
1,4-Dichlorobenzene	ND	90	92	2.2	72	75	4.1	70 - 130	30	
2,2-Dichloropropane	ND	88	88	0.0	73	74	1.4	70 - 130	30	
2-Chlorotoluene	ND	98	100	2.0	75	79	5.2	70 - 130	30	
2-Hexanone	ND	112	114	1.8	<40	<40	NC	70 - 130	30	m
2-Isopropyltoluene	ND	105	108	2.8	86	94	8.9	70 - 130	30	
4-Chlorotoluene	ND	91	95	4.3	78	81	3.8	70 - 130	30	
4-Methyl-2-pentanone	ND	116	115	0.9	65	72	10.2	70 - 130	30	m
Acetone	ND	124	118	5.0	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	101	94	7.2	66	69	4.4	70 - 130	30	m
Benzene	ND	101	100	1.0	80	82	2.5	70 - 130	30	
Bromobenzene	ND	98	100	2.0	78	82	5.0	70 - 130	30	
Bromochloromethane	ND	89	89	0.0	76	78	2.6	70 - 130	30	
Bromodichloromethane	ND	103	101	2.0	83	86	3.6	70 - 130	30	
Bromoform	ND	105	102	2.9	77	79	2.6	70 - 130	30	
Bromomethane	ND	100	95	5.1	77	78	1.3	70 - 130	30	
Carbon Disulfide	ND	116	110	5.3	94	96	2.1	70 - 130	30	
Carbon tetrachloride	ND	91	90	1.1	79	81	2.5	70 - 130	30	
Chlorobenzene	ND	95	93	2.1	79	82	3.7	70 - 130	30	
Chloroethane	ND	99	97	2.0	84	85	1.2	70 - 130	30	
Chloroform	ND	93	91	2.2	78	79	1.3	70 - 130	30	
Chloromethane	ND	91	92	1.1	82	84	2.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	92	92	0.0	78	79	1.3	70 - 130	30	
cis-1,3-Dichloropropene	ND	101	98	3.0	78	82	5.0	70 - 130	30	
Dibromochloromethane	ND	102	97	5.0	82	83	1.2	70 - 130	30	
Dibromoethane	ND	105	103	1.9	84	86	2.4	70 - 130	30	
Dibromomethane	ND	103	102	1.0	84	86	2.4	70 - 130	30	
Dichlorodifluoromethane	ND	95	94	1.1	95	96	1.0	70 - 130	30	
Ethylbenzene	ND	96	94	2.1	74	77	4.0	70 - 130	30	
Hexachlorobutadiene	ND	86	93	7.8	65	74	12.9	70 - 130	30	m
Isopropylbenzene	ND	97	99	2.0	75	80	6.5	70 - 130	30	
m&p-Xylene	ND	96	94	2.1	68	72	5.7	70 - 130	30	m
Methyl ethyl ketone	ND	118	113	4.3	<40	<40	NC	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	118	113	4.3	95	96	1.0	70 - 130	30	
Methylene chloride	ND	86	83	3.6	71	72	1.4	70 - 130	30	
Naphthalene	ND	97	98	1.0	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	92	96	4.3	59	65	9.7	70 - 130	30	m
n-Propylbenzene	ND	90	93	3.3	74	79	6.5	70 - 130	30	
o-Xylene	ND	104	101	2.9	77	82	6.3	70 - 130	30	
p-Isopropyltoluene	ND	99	103	4.0	72	75	4.1	70 - 130	30	
sec-Butylbenzene	ND	93	95	2.1	73	78	6.6	70 - 130	30	
Styrene	ND	104	101	2.9	66	72	8.7	70 - 130	30	m
tert-Butylbenzene	ND	96	98	2.1	81	86	6.0	70 - 130	30	
Tetrachloroethene	ND	94	92	2.2	86	87	1.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	98	3.0	85	86	1.2	70 - 130	30	
Toluene	ND	101	100	1.0	78	81	3.8	70 - 130	30	
trans-1,2-Dichloroethene	ND	101	96	5.1	80	81	1.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	101	100	1.0	75	78	3.9	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	108	3.6	76	80	5.1	70 - 130	30	
Trichloroethene	ND	102	101	1.0	84	85	1.2	70 - 130	30	
Trichlorofluoromethane	ND	115	112	2.6	91	94	3.2	70 - 130	30	
Trichlorotrifluoroethane	ND	107	107	0.0	96	98	2.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Vinyl chloride	ND	99	96	3.1	83	86	3.6	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	98	102	4.0	100	98	2.0	70 - 130	30	
% Bromofluorobenzene	95	101	99	2.0	100	98	2.0	70 - 130	30	
% Dibromofluoromethane	84	84	85	1.2	85	83	2.4	70 - 130	30	
% Toluene-d8	100	103	102	1.0	101	99	2.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200810, QC Sample No: BB86213 (BB85858, BB85859)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	105	102	2.9	96	95	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	105	101	3.9	100	95	5.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	94	3.2	103	102	1.0	70 - 130	30	
1,1,2-Trichloroethane	ND	104	103	1.0	95	91	4.3	70 - 130	30	
1,1-Dichloroethane	ND	94	90	4.3	85	81	4.8	70 - 130	30	
1,1-Dichloroethene	ND	106	101	4.8	94	99	5.2	70 - 130	30	
1,1-Dichloropropene	ND	101	97	4.0	98	96	2.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	102	91	11.4	75	66	12.8	70 - 130	30	m
1,2,3-Trichloropropane	ND	100	105	4.9	97	101	4.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	92	86	6.7	73	68	7.1	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	97	94	3.1	93	92	1.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	104	1.0	96	92	4.3	70 - 130	30	
1,2-Dichlorobenzene	ND	94	91	3.2	83	81	2.4	70 - 130	30	
1,2-Dichloroethane	ND	101	97	4.0	95	91	4.3	70 - 130	30	
1,2-Dichloropropane	ND	106	102	3.8	97	95	2.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	99	96	3.1	94	93	1.1	70 - 130	30	
1,3-Dichlorobenzene	ND	92	90	2.2	83	82	1.2	70 - 130	30	
1,3-Dichloropropane	ND	102	103	1.0	95	93	2.1	70 - 130	30	
1,4-Dichlorobenzene	ND	90	88	2.2	81	80	1.2	70 - 130	30	
2,2-Dichloropropane	ND	100	94	6.2	88	83	5.8	70 - 130	30	
2-Chlorotoluene	ND	96	94	2.1	91	91	0.0	70 - 130	30	
2-Hexanone	ND	77	72	6.7	55	51	7.5	70 - 130	30	m
2-Isopropyltoluene	ND	97	93	4.2	100	96	4.1	70 - 130	30	
4-Chlorotoluene	ND	91	89	2.2	89	88	1.1	70 - 130	30	
4-Methyl-2-pentanone	ND	96	94	2.1	97	91	6.4	70 - 130	30	
Acetone	ND	89	82	8.2	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	89	88	1.1	78	71	9.4	70 - 130	30	
Benzene	ND	106	102	3.8	98	95	3.1	70 - 130	30	
Bromobenzene	ND	99	98	1.0	90	91	1.1	70 - 130	30	
Bromochloromethane	ND	103	102	1.0	95	92	3.2	70 - 130	30	
Bromodichloromethane	ND	104	103	1.0	97	96	1.0	70 - 130	30	
Bromoform	ND	108	108	0.0	95	92	3.2	70 - 130	30	
Bromomethane	ND	84	91	8.0	70	86	20.5	70 - 130	30	
Carbon Disulfide	ND	107	107	0.0	96	103	7.0	70 - 130	30	
Carbon tetrachloride	ND	100	99	1.0	99	99	0.0	70 - 130	30	
Chlorobenzene	ND	96	94	2.1	89	88	1.1	70 - 130	30	
Chloroethane	ND	112	115	2.6	104	111	6.5	70 - 130	30	
Chloroform	ND	107	102	4.8	97	92	5.3	70 - 130	30	
Chloromethane	ND	107	101	5.8	113	103	9.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	109	102	6.6	96	89	7.6	70 - 130	30	
cis-1,3-Dichloropropene	ND	99	96	3.1	89	86	3.4	70 - 130	30	
Dibromochloromethane	ND	103	105	1.9	95	94	1.1	70 - 130	30	
Dibromoethane	ND	102	100	2.0	93	89	4.4	70 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromomethane	ND	102	100	2.0	95	91	4.3	70 - 130	30	
Dichlorodifluoromethane	ND	104	99	4.9	117	113	3.5	70 - 130	30	
Ethylbenzene	ND	99	96	3.1	94	92	2.2	70 - 130	30	
Hexachlorobutadiene	ND	95	83	13.5	89	80	10.7	70 - 130	30	
Isopropylbenzene	ND	96	95	1.0	96	96	0.0	70 - 130	30	
m&p-Xylene	ND	96	93	3.2	91	88	3.4	70 - 130	30	
Methyl ethyl ketone	ND	82	76	7.6	47	43	8.9	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	117	87	29.4	111	85	26.5	70 - 130	30	
Methylene chloride	ND	106	98	7.8	89	92	3.3	70 - 130	30	
Naphthalene	ND	115	92	22.2	89	67	28.2	70 - 130	30	m
n-Butylbenzene	ND	96	91	5.3	91	86	5.6	70 - 130	30	
n-Propylbenzene	ND	92	90	2.2	93	93	0.0	70 - 130	30	
o-Xylene	ND	98	94	4.2	93	91	2.2	70 - 130	30	
p-Isopropyltoluene	ND	98	95	3.1	92	89	3.3	70 - 130	30	
sec-Butylbenzene	ND	95	91	4.3	95	93	2.1	70 - 130	30	
Styrene	ND	99	95	4.1	87	87	0.0	70 - 130	30	
tert-Butylbenzene	ND	98	94	4.2	98	95	3.1	70 - 130	30	
Tetrachloroethene	ND	95	95	0.0	95	95	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	104	105	1.0	104	98	5.9	70 - 130	30	
Toluene	ND	102	99	3.0	95	92	3.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	121	88	31.6	102	81	23.0	70 - 130	30	r
trans-1,3-Dichloropropene	ND	99	96	3.1	87	83	4.7	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	93	95	2.1	87	84	3.5	70 - 130	30	
Trichloroethene	ND	109	104	4.7	94	91	3.2	70 - 130	30	
Trichlorofluoromethane	ND	112	108	3.6	98	102	4.0	70 - 130	30	
Trichlorotrifluoroethane	ND	105	98	6.9	96	102	6.1	70 - 130	30	
Vinyl chloride	ND	113	102	10.2	118	106	10.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	99	100	1.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	98	101	100	1.0	101	101	0.0	70 - 130	30	
% Dibromofluoromethane	99	101	101	0.0	105	106	0.9	70 - 130	30	
% Toluene-d8	101	100	100	0.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200909, QC Sample No: BB86917 (BB85856, BB85857)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	102	105	2.9	93	92	1.1	70 - 130	30	
1,1,1-Trichloroethane	ND	99	98	1.0	94	94	0.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	97	99	2.0	92	90	2.2	70 - 130	30	
1,1,2-Trichloroethane	ND	104	105	1.0	92	89	3.3	70 - 130	30	
1,1-Dichloroethane	ND	86	85	1.2	82	82	0.0	70 - 130	30	
1,1-Dichloroethene	ND	87	97	10.9	95	91	4.3	70 - 130	30	
1,1-Dichloropropene	ND	101	100	1.0	98	94	4.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	103	97	6.0	80	83	3.7	70 - 130	30	
1,2,3-Trichloropropane	ND	90	109	19.1	97	79	20.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	93	92	1.1	79	78	1.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	98	99	1.0	91	86	5.6	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	108	106	1.9	85	85	0.0	70 - 130	30	
1,2-Dichlorobenzene	ND	93	92	1.1	89	85	4.6	70 - 130	30	
1,2-Dichloroethane	ND	102	102	0.0	94	93	1.1	70 - 130	30	
1,2-Dichloropropane	ND	104	105	1.0	97	96	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	99	100	1.0	94	90	4.3	70 - 130	30	
1,3-Dichlorobenzene	ND	91	92	1.1	88	84	4.7	70 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3-Dichloropropane	ND	102	104	1.9	94	91	3.2	70 - 130	30	
1,4-Dichlorobenzene	ND	89	89	0.0	87	83	4.7	70 - 130	30	
2,2-Dichloropropane	ND	94	91	3.2	87	89	2.3	70 - 130	30	
2-Chlorotoluene	ND	94	96	2.1	92	88	4.4	70 - 130	30	
2-Hexanone	ND	68	72	5.7	78	68	13.7	70 - 130	30	l,m
2-Isopropyltoluene	ND	96	96	0.0	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	90	91	1.1	92	87	5.6	70 - 130	30	
4-Methyl-2-pentanone	ND	97	98	1.0	87	86	1.2	70 - 130	30	
Acetone	ND	61	74	19.3	74	67	9.9	70 - 130	30	l,m
Acrylonitrile	ND	88	87	1.1	77	77	0.0	70 - 130	30	
Benzene	ND	104	105	1.0	96	94	2.1	70 - 130	30	
Bromobenzene	ND	99	99	0.0	91	88	3.4	70 - 130	30	
Bromochloromethane	ND	98	99	1.0	90	89	1.1	70 - 130	30	
Bromodichloromethane	ND	102	105	2.9	96	95	1.0	70 - 130	30	
Bromoform	ND	103	108	4.7	89	89	0.0	70 - 130	30	
Bromomethane	ND	72	82	13.0	88	79	10.8	70 - 130	30	
Carbon Disulfide	ND	87	101	14.9	99	92	7.3	70 - 130	30	
Carbon tetrachloride	ND	100	103	3.0	96	96	0.0	70 - 130	30	
Chlorobenzene	ND	94	95	1.1	92	89	3.3	70 - 130	30	
Chloroethane	ND	93	105	12.1	110	103	6.6	70 - 130	30	
Chloroform	ND	100	99	1.0	93	92	1.1	70 - 130	30	
Chloromethane	ND	103	97	6.0	96	101	5.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	100	98	2.0	91	93	2.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	99	97	2.0	92	92	0.0	70 - 130	30	
Dibromochloromethane	ND	101	106	4.8	92	91	1.1	70 - 130	30	
Dibromoethane	ND	101	101	0.0	90	88	2.2	70 - 130	30	
Dibromomethane	ND	102	102	0.0	91	89	2.2	70 - 130	30	
Dichlorodifluoromethane	ND	96	92	4.3	100	98	2.0	70 - 130	30	
Ethylbenzene	ND	96	98	2.1	93	89	4.4	70 - 130	30	
Hexachlorobutadiene	ND	97	95	2.1	83	87	4.7	70 - 130	30	
Isopropylbenzene	ND	97	97	0.0	95	90	5.4	70 - 130	30	
m&p-Xylene	ND	94	95	1.1	91	88	3.4	70 - 130	30	
Methyl ethyl ketone	ND	63	68	7.6	72	67	7.2	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	107	91	16.2	85	107	22.9	70 - 130	30	
Methylene chloride	ND	84	94	11.2	92	91	1.1	70 - 130	30	
Naphthalene	ND	116	98	16.8	69	85	20.8	70 - 130	30	m
n-Butylbenzene	ND	96	97	1.0	90	84	6.9	70 - 130	30	
n-Propylbenzene	ND	91	91	0.0	92	87	5.6	70 - 130	30	
o-Xylene	ND	95	96	1.0	95	93	2.1	70 - 130	30	
p-Isopropyltoluene	ND	98	98	0.0	92	86	6.7	70 - 130	30	
sec-Butylbenzene	ND	95	96	1.0	95	90	5.4	70 - 130	30	
Styrene	ND	97	98	1.0	94	92	2.2	70 - 130	30	
tert-Butylbenzene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Tetrachloroethene	ND	96	98	2.1	95	91	4.3	70 - 130	30	
Tetrahydrofuran (THF)	ND	98	101	3.0	88	86	2.3	70 - 130	30	
Toluene	ND	101	101	0.0	94	92	2.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	99	85	15.2	82	101	20.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	99	99	0.0	90	90	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	104	99	4.9	88	91	3.4	70 - 130	30	
Trichloroethene	ND	104	104	0.0	95	92	3.2	70 - 130	30	
Trichlorofluoromethane	ND	94	102	8.2	97	91	6.4	70 - 130	30	
Trichlorotrifluoroethane	ND	84	95	12.3	97	89	8.6	70 - 130	30	
Vinyl chloride	ND	109	100	8.6	94	102	8.2	70 - 130	30	

QA/QC Data

SDG I.D.: GBB85851

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% 1,2-dichlorobenzene-d4	101	100	99	1.0	102	99	3.0	70 - 130	30
% Bromofluorobenzene	101	102	102	0.0	101	100	1.0	70 - 130	30
% Dibromofluoromethane	102	108	107	0.9	109	106	2.8	70 - 130	30
% Toluene-d8	101	100	99	1.0	100	100	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 22, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB85851

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB85851	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	720	140	140	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2900	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5000	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5000	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2600	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2600	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	510	1000	1000	ug/Kg
BB85851	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.47	0.010	0.15	0.15	mg/L
BB85852	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	360	140	140	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6400	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6400	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7700	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	12000	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	12000	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6400	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6400	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2000	250	1000	1000	ug/Kg
BB85852	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	160	7	7	ug/Kg
BB85852	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	ND	160	38	38	ug/Kg
BB85852	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	26.7	0.68	10	10	mg/Kg
BB85853	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB85854	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB85855	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	740	140	140	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	400	400	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	1600	1100	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB85851

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB85856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	12000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	12000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	16000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	330	330	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	25000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	25000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7100	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	14000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	14000	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4800	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	4800	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	520	1000	1000	ug/Kg
BB85856	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	900	22	500	500	mg/Kg
BB85856	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	120	7	7	ug/Kg
BB85856	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	ND	120	38	38	ug/Kg
BB85856	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	32.3	0.78	10	10	mg/Kg
BB85857	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	140	140	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1800	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	5400	1200	1200	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	400	400	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3000	2800	2800	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3000	1650	1650	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	1400	1400	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	13000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	13000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	16000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	330	330	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	26000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	26000	1300	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB85851

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB85857	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7300	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	12000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	12000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	4000	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	1300	1000	1000	ug/Kg
BB85857	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	750	22	500	500	mg/Kg
BB85857	MAGU-DAS	$PCB_SMR	PCB-1260	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	1200	370	1000	1000	ug/Kg
BB85857	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	250	7	7	ug/Kg
BB85857	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	ND	250	38	38	ug/Kg
BB85857	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	39.5	0.67	10	10	mg/Kg
BB85857	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.280	0.010	0.15	0.15	mg/L
BB85859	MAGU-DAS	$8260MER	Acrylonitrile	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	500	100	100	ug/Kg
BB85859	MAGU-DAS	$8260MER	Benzene	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	200	200	ug/Kg
BB85859	MAGU-DAS	$8260MER	1,2-Dichloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	200	200	ug/Kg
BB85859	MAGU-DAS	$8260MER	Bromodichloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	110	110	ug/Kg
BB85859	MAGU-DAS	$8260MER	Dibromoethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	100	100	ug/Kg
BB85859	MAGU-DAS	$8260MER	Dibromoethane	mg/kg	CT	Volatile Organic Compound	RES DEC (mg/kg)	ND	250	7	7	ug/Kg
BB85859	MAGU-DAS	$8260MER	Dibromochloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	100	100	ug/Kg
BB85859	MAGU-DAS	$8260MER	1,1,1,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	200	200	ug/Kg
BB85859	MAGU-DAS	$8260MER	1,1,2,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	250	100	100	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857, BB85858, BB85859

Sampling Date(s): 5/14/2012

RCP Methods Used:

☑ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☑ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Tuesday, May 22, 2012

Printed Name: Greg Lawrence

Position: Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

The following analytes from the 6010 RCP Metals list were not reported: Antimony, Beryllium, Copper, Nickel, Thallium, Vanadium, Zinc.

The client requested a short list for 8270 RCP Semivolatile.

8270 Semi-volatile Organics:
Pyridine reporting levels do not meet GBPM criteria. Due to the concentration of target and non-target compounds not all of the requested criteria could be achieved.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/16/12-3 (BB85853, BB85854, BB85855)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 5/16/2012

Instrument: Au-fid1 05/18/12-3 (BB85856, BB85857)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: C36

Printed Name Jeff Bucko
Position: Chemist
Date: 5/18/2012

Instrument: Au-fid84 05/18/12-3 (BB85851, BB85852)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: C36

Printed Name Jeff Bucko
Position: Chemist
Date: 5/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

QC (Site Specific)

---------- Sample No: BB85853, QA/QC Batch: 200716 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB85665, QA/QC Batch: 200647 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/16/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

Initial Calibration ECD14-051612
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/16/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

QC (Batch Specific)

---------- Sample No: BB85112, QA/QC Batch: 200569 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86099, QA/QC Batch: 200724 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/16/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/16/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

QC (Site Specific)

---------- Sample No: BB85853, QA/QC Batch: 200758 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB85742, QA/QC Batch: 200759 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/17/12-1 (BB85852, BB85856, BB85857)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/17/2012

Instrument: Icp9 05/15/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/15/2012

Instrument: Icp9 05/16/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/16/2012

Instrument: Icp9 05/17/12-1 (BB85851, BB85852, BB85856, BB85857)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/17/2012

QC (Batch Specific)

---------- Sample No: BB61252, QA/QC Batch: 200438 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB85594, QA/QC Batch: 200650 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 05/16/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/16/2012

QC (Batch Specific)

---------- Sample No: BB86098, QA/QC Batch: 200715 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 05/17/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/17/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

QC (Batch Specific)

---------- Sample No: BB85516, QA/QC Batch: 200628 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200712 (Samples: BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857): -----

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,4-Dinitrophenol)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, 3-Nitroaniline, 4-Chloroaniline, Aniline, Pentachloronitrobenzene)

Instrument: Chem09 05/15/12-1 (BB85851, BB85852, BB85853, BB85854, BB85855, BB85856, BB85857)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, 3-Nitroaniline, 2-Nitroaniline, Carbazole, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/15/2012

Instrument: Chem12 05/16/12-1 (BB85851, BB85852, BB85856)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/16/2012

QC (Batch Specific)

---------- Sample No: BB86101, QA/QC Batch: 200712 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(23%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(148%), 3-Nitroaniline(>150%), 4-Chloroaniline(139%), Pentachloronitrobenzene(>150%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(22%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(149%), 3-Nitroaniline(>150%), 4-Chloroaniline(147%), Aniline(131%), Pentachloronitrobenzene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200810 (Samples: BB85858, BB85859): -----

QC Batch 200909 (Samples: BB85856, BB85857): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (Methyl ethyl ketone)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone, Acetone)

Instrument: Chem03 05/15/12-1 (BB85853, BB85854, BB85855)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Tetrahydrofuran (THF)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

Printed Name Johanna Harrington
Position: Chemist
Date: 5/15/2012

Instrument: Chem03 05/15/12-2 (BB85858, BB85859)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 5/15/2012

Instrument: Chem03 05/16/12-1 (BB85856, BB85857)

Initial Calibration Verification (RCPS_0511):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Chloroethane

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/16/2012

Instrument: Chem11 05/15/12-1 (BB85851, BB85852)

Initial Calibration Verification (CHEM11/RCPS_0502):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%:

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 5/15/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 22, 2012

SDG I.D.: GBB85851

QC (Batch Specific)

---------- Sample No: BB86085, QA/QC Batch: 200803 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86108, QA/QC Batch: 200808 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB86213, QA/QC Batch: 200810 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: trans-1,2-Dichloroethene(31.6%)

---------- Sample No: BB86917, QA/QC Batch: 200909 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(68%), Acetone(61%), Methyl ethyl ketone(63%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Methyl ethyl ketone(68%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MCI

Project P.O:
Phone #: 860 2249141
Fax #: 860 2249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-14-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 metals	SPLP RCRA 8 Metals	Soil VOA Vials [ ] methanol [X] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
85851	GP-1 1'-3'	S	5-14-12	9:04am	X	X	X	X	X	X	X						3	2			
85852	GP-2 1'-3'	↓	↓	8:12am	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85853	GP-3 1'-3'	↓	↓	6:55am	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85854	GP-4 2'-4'	↓	↓	10:11am	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85855	GP-5 1'-3'	↓	↓	12:01pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85856	GP-7 2'-4'	↓	↓	1:24pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85857	GP-8 2'-4'	↓	↓	2:55pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			
85858	TB-12 -Low	↓	↓	–	↓												↓				
85859	TB-High																				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/15/12	9:50
[signature]	Paradise	5/15/12	1444

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Sunday, May 20, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB82285 - BB82290

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	6:49
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82285

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-28 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	0.007	0.004	mg/L	05/09/12		LK	6010/200.7
Barium	0.077	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium	0.012	0.001	mg/L	05/09/12		LK	6010/200.7
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/15/12		LK	6010/200.7
Barium (Dissolved)	0.073	0.002	mg/L	05/15/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/15/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead	0.004	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/10/12		AG	SW846-3005
Total Metals Digestion	Completed			05/07/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Dissolved Mercury Digestion	Completed			05/08/12		X/X	SW7470
Mercury Digestion	Completed			05/08/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/07/12		TB	SW3510C
Extraction for Pest (2 Liter)	Completed			05/07/12		TB	SW3510
Semi-Volatile Extraction	Completed			05/07/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	76		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	105		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1221	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1232	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1242	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1248	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1254	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1260	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1262	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1268	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
QA/QC Surrogates							
% DCBP	92		%	05/10/12		M/K	30 - 150 %
% TCMX	76		%	05/10/12		M/K	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/09/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/09/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/09/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/09/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/09/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/09/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/09/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/09/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/09/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/09/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 GW

Phoenix I.D.: BB82285

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/09/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	05/09/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	81		%	05/09/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	1.4	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	116		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	111		%	05/09/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/09/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/09/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/09/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 GW

Phoenix I.D.: BB82285

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/09/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/09/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/09/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/09/12		DD	SW8270
Aniline	ND	10	ug/L	05/09/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/09/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
Benzidine	ND	50	ug/L	05/09/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/09/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/09/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/09/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/09/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
Phenol	ND	10	ug/L	05/09/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/09/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/09/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	05/09/12		DD	15 - 130 %
% Phenol-d5	44		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	114		%	05/09/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/09/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.06	0.040	ug/L	05/09/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-28 GW

Phoenix I.D.: BB82285

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/09/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/09/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/09/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/09/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/09/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/09/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	05/09/12		DD	15 - 130 %
% Phenol-d5	44		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	114		%	05/09/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 20, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	7:38
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82286

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-30 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	0.008	0.004	mg/L	05/09/12		LK	6010/200.7
Barium	0.164	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium	0.030	0.001	mg/L	05/09/12		LK	6010/200.7
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/15/12		LK	6010/200.7
Barium (Dissolved)	0.014	0.002	mg/L	05/15/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/15/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead	0.009	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/10/12		AG	SW846-3005
Total Metals Digestion	Completed			05/07/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Dissolved Mercury Digestion	Completed			05/08/12		X/X	SW7470
Mercury Digestion	Completed			05/08/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/07/12		TB	SW3510C
Extraction for Pest (2 Liter)	Completed			05/07/12		TB	SW3510
Semi-Volatile Extraction	Completed			05/07/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	74		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	114		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1221	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1232	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1242	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1248	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1254	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1260	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1262	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1268	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
QA/QC Surrogates							
% DCBP	85		%	05/10/12		M/K	30 - 150 %
% TCMX	73		%	05/10/12		M/K	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/09/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/09/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/09/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/09/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/09/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/09/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/09/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/09/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/09/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/09/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 GW

Phoenix I.D.: BB82286

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/09/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	92		%	05/09/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	83		%	05/09/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	118		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	110		%	05/09/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/09/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/09/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/09/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 GW

Phoenix I.D.: BB82286

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/09/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/09/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/09/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/09/12		DD	SW8270
Aniline	ND	10	ug/L	05/09/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/09/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
Benzidine	ND	50	ug/L	05/09/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/09/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/09/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/09/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/09/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
Phenol	ND	10	ug/L	05/09/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/09/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/09/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/09/12		DD	15 - 130 %
% Phenol-d5	65		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	118		%	05/09/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/09/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	05/09/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-30 GW

Phoenix I.D.: BB82286

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/09/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/09/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/09/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/09/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/09/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/09/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/09/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	05/09/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/09/12		DD	15 - 130 %
% Phenol-d5	65		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	118		%	05/09/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 20, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	10:11
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82287

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-56 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	0.008	0.004	mg/L	05/09/12		LK	6010/200.7
Barium	0.150	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium	0.034	0.001	mg/L	05/09/12		LK	6010/200.7
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/15/12		LK	6010/200.7
Barium (Dissolved)	0.015	0.002	mg/L	05/15/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/15/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead	0.006	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/10/12		AG	SW846-3005
Total Metals Digestion	Completed			05/07/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Dissolved Mercury Digestion	Completed			05/08/12		X/X	SW7470
Mercury Digestion	Completed			05/08/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/07/12		TB	SW3510C
Extraction for Pest (2 Liter)	Completed			05/07/12		TB	SW3510
Semi-Volatile Extraction	Completed			05/07/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	71		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	120		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1221	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1232	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1242	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1248	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1254	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1260	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1262	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1268	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
QA/QC Surrogates							
% DCBP	89		%	05/10/12		M/K	30 - 150 %
% TCMX	74		%	05/10/12		M/K	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/09/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/09/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/09/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/09/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/09/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/09/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/09/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/09/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/09/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/09/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-56 GW

Phoenix I.D.: BB82287

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/09/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	103		%	05/09/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	98		%	05/09/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	1.7	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	119		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	109		%	05/09/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/09/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/09/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/09/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-56 GW

Phoenix I.D.: BB82287

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/09/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/09/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/09/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/09/12		DD	SW8270
Aniline	ND	10	ug/L	05/09/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/09/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
Benzidine	ND	50	ug/L	05/09/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/09/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/09/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/09/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/09/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
Phenol	ND	10	ug/L	05/09/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/09/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/09/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	118		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	86		%	05/09/12		DD	15 - 130 %
% Phenol-d5	70		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	102		%	05/09/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.05	0.040	ug/L	05/08/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-56 GW

Phoenix I.D.: BB82287

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/08/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/08/12		DD	SW8270 (SIM)
Phenanthrene	0.13	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	118		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	86		%	05/08/12		DD	15 - 130 %
% Phenol-d5	70		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	102		%	05/08/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 20, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	11:34
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82288

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-58 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	0.009	0.004	mg/L	05/09/12		LK	6010/200.7
Barium	0.071	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium	0.014	0.001	mg/L	05/09/12		LK	6010/200.7
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/15/12		LK	6010/200.7
Barium (Dissolved)	0.015	0.002	mg/L	05/15/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/15/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead	0.006	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/10/12		AG	SW846-3005
Total Metals Digestion	Completed			05/07/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Dissolved Mercury Digestion	Completed			05/08/12		X/X	SW7470
Mercury Digestion	Completed			05/08/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/07/12		TB	SW3510C
Extraction for Pest (2 Liter)	Completed			05/07/12		TB	SW3510
Semi-Volatile Extraction	Completed			05/07/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	73		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	106		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1221	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1232	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1242	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1248	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1254	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1260	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1262	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1268	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
QA/QC Surrogates							
% DCBP	93		%	05/10/12		M/K	30 - 150 %
% TCMX	82		%	05/10/12		M/K	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/09/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/09/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/09/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/09/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/09/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/09/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/09/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/09/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/09/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/09/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-58 GW

Phoenix I.D.: BB82288

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/09/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	94		%	05/09/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	94		%	05/09/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	118		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	109		%	05/09/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/09/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/09/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/09/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-58 GW

Phoenix I.D.: BB82288

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/09/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/09/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/09/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/09/12		DD	SW8270
Aniline	ND	10	ug/L	05/09/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/09/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
Benzidine	ND	50	ug/L	05/09/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/09/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/09/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/09/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/09/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
Phenol	ND	10	ug/L	05/09/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/09/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/09/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	126		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/09/12		DD	15 - 130 %
% Phenol-d5	65		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	91		%	05/09/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	05/08/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-58 GW

Phoenix I.D.: BB82288

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/08/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/08/12		DD	SW8270 (SIM)
Phenanthrene	0.05	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	126		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/08/12		DD	15 - 130 %
% Phenol-d5	65		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	91		%	05/08/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 20, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	13:34
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82289

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: FB-2

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		LK	6010/200.7
Barium	< 0.002	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/15/12		LK	6010/200.7
Barium (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/15/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/08/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/10/12		AG	SW846-3005
Total Metals Digestion	Completed			05/07/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Dissolved Mercury Digestion	Completed			05/08/12		X/X	SW7470
Mercury Digestion	Completed			05/08/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/07/12		TB	SW3510C
Extraction for Pest (2 Liter)	Completed			05/07/12		TB	SW3510
Semi-Volatile Extraction	Completed			05/07/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-2

Phoenix I.D.: BB82289

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	76		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	105		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1221	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1232	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1242	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1248	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1254	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1260	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1262	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
PCB-1268	ND	0.10	ug/L	05/10/12		M/K	608/ 8082
QA/QC Surrogates							
% DCBP	121		%	05/10/12		M/K	30 - 150 %
% TCMX	103		%	05/10/12		M/K	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/09/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/09/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/09/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/09/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/09/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/09/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/09/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/09/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/09/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/09/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/09/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/09/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/09/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/09/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-2

Phoenix I.D.: BB82289

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/09/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	105		%	05/09/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	94		%	05/09/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-2

Phoenix I.D.: BB82289

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	119		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	105		%	05/09/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/09/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/09/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/09/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/09/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/09/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: FB-2

Phoenix I.D.: BB82289

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/09/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/09/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/09/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/09/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/09/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/09/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/09/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/09/12		DD	SW8270
Aniline	ND	10	ug/L	05/09/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/09/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
Benzidine	ND	50	ug/L	05/09/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/09/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/09/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/09/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/09/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/09/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/09/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/09/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/09/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/09/12		DD	SW8270
Phenol	ND	10	ug/L	05/09/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/09/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/09/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/09/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/09/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	05/09/12		DD	15 - 130 %
% Nitrobenzene-d5	88		%	05/09/12		DD	15 - 130 %
% Phenol-d5	71		%	05/09/12		DD	15 - 130 %
% Terphenyl-d14	95		%	05/09/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	05/08/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: FB-2

Phoenix I.D.: BB82289

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/08/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/08/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/08/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/08/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/08/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/08/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	05/08/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	88		%	05/08/12		DD	15 - 130 %
% Phenol-d5	71		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	95		%	05/08/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 20, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 20, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/04/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/07/12	14:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB82285
Phoenix ID: BB82290

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-11

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/09/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Acetone	ND	25	ug/L	05/09/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-11

Phoenix I.D.: BB82290

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	05/09/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/09/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/09/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/09/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/09/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/09/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/09/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/09/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/09/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/09/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/09/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/09/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/09/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/09/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/09/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/09/12		R/T	70 - 130 %
% Bromofluorobenzene	120		%	05/09/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	05/09/12		R/T	70 - 130 %
% Toluene-d8	101		%	05/09/12		R/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Phoenix I.D.: BB82290

Client ID: TB-11

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 20, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 20, 2012

QA/QC Data

SDG I.D.: GBB82285

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200147, QC Sample No: BB78237 (BB82285, BB82286, BB82287, BB82288, BB82289)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	94.5	93.2	1.4	99.9	101	1.1	75 - 125	20
Barium	BDL	0.136	0.141	3.60	98.3	96.9	1.4	99.1	99.9	0.8	75 - 125	20
Cadmium	BDL	0.001	0.001	NC	96.1	94.4	1.8	99.3	101	1.7	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	96.2	94.4	1.9	97.1	98.3	1.2	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	95.6	93.4	2.3	98.0	99.0	1.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	91.4	90.6	0.9	95.3	97.9	2.7	75 - 125	20
Silver	BDL	<0.002	<0.001	NC	96.1	94.2	2.0	97.4	98.7	1.3	75 - 125	20
QA/QC Batch 200179, QC Sample No: BB82287 (BB82285, BB82286, BB82287, BB82288, BB82289)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	101	97.9	3.1	106	102	3.8	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 200457, QC Sample No: BB82571 (BB82285, BB82286, BB82287, BB82288, BB82289)												
ICP Metals - Dissolved												
Arsenic	BDL	0.004	<0.004	NC	95.6	101	5.5	104	107	2.8	75 - 125	20
Barium	BDL	0.065	0.064	1.60	94.7	99.2	4.6	98.0	102	4.0	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	95.5	101	5.6	103	106	2.9	75 - 125	20
Chromium	BDL	0.002	0.002	NC	94.5	99.9	5.6	100	104	3.9	75 - 125	20
Lead	BDL	0.024	0.026	8.00	96.4	103	6.6	104	108	3.8	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	93.7	100	6.5	103	106	2.9	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	91.5	96.6	5.4	82.7	84.8	2.5	75 - 125	20

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 20, 2012

QA/QC Data

SDG I.D.: GBB82285

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199956, QC Sample No: BB80634 (BB82285, BB82286, BB82287, BB82288, BB82289)									
Chlorinated Herbicides - Ground Water									
2,4,5-T	ND	76	88	14.6				40 - 140	20
2,4,5-TP (Silvex)	ND	73	84	14.0				40 - 140	20
2,4-D	ND	75	86	13.7				40 - 140	20
2,4-DB	ND	96	88	8.7				40 - 140	20
Dalapon	ND	61	72	16.5				40 - 140	20
Dicamba	ND	70	79	12.1				40 - 140	20
Dichloroprop	ND	64	72	11.8				40 - 140	20
Dinoseb	ND	78	85	8.6				40 - 140	20
% DCAA (Surrogate Rec)	75	59	65	9.7				30 - 150	20

Comment:

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 200144, QC Sample No: BB82285 (BB82285, BB82286, BB82287, BB82288, BB82289)									
Pesticides - Ground Water									
4,4' -DDD	ND	110	111	0.9				40 - 140	20
4,4' -DDE	ND	95	96	1.0				40 - 140	20
4,4' -DDT	ND	102	101	1.0				40 - 140	20
a-BHC	ND	91	94	3.2				40 - 140	20
a-Chlordane	ND	89	89	0.0				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	83	84	1.2				40 - 140	20
b-BHC	ND	91	92	1.1				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	99	99	0.0				40 - 140	20
Dieldrin	ND	95	94	1.1				40 - 140	20
Endosulfan I	ND	85	85	0.0				40 - 140	20
Endosulfan II	ND	96	95	1.0				40 - 140	20
Endosulfan sulfate	ND	91	91	0.0				40 - 140	20
Endrin	ND	96	95	1.0				40 - 140	20
Endrin aldehyde	ND	88	85	3.5				40 - 140	20
Endrin ketone	ND	101	100	1.0				40 - 140	20
g-BHC	ND	91	93	2.2				40 - 140	20
g-Chlordane	ND	87	88	1.1				40 - 140	20
Heptachlor	ND	85	86	1.2				40 - 140	20
Heptachlor epoxide	ND	91	92	1.1				40 - 140	20
Methoxychlor	ND	102	102	0.0				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	89	98	98	0.0				30 - 150	20
% TCMX	81	88	93	5.5				30 - 150	20

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Data

SDG I.D.: GBB82285

QA/QC Batch 200131, QC Sample No: BB82285 (BB82285, BB82286, BB82287, BB82288, BB82289)

Semivolatiles - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,2,4,5-Tetrachlorobenzene	ND	41	40	2.5				30 - 130	20
1,2,4-Trichlorobenzene	ND	69	68	1.5				30 - 130	20
1,2-Dichlorobenzene	ND	72	71	1.4				30 - 130	20
1,3-Dichlorobenzene	ND	69	69	0.0				30 - 130	20
1,4-Dichlorobenzene	ND	72	72	0.0				30 - 130	20
2,4,5-Trichlorophenol	ND	79	78	1.3				30 - 130	20
2,4,6-Trichlorophenol	ND	78	77	1.3				30 - 130	20
2,4-Dichlorophenol	ND	83	83	0.0				30 - 130	20
2,4-Dimethylphenol	ND	53	53	0.0				30 - 130	20
2,4-Dinitrophenol	ND	45	49	8.5				30 - 130	20
2,4-Dinitrotoluene	ND	90	90	0.0				30 - 130	20
2,6-Dinitrotoluene	ND	85	86	1.2				30 - 130	20
2-Chloronaphthalene	ND	73	73	0.0				30 - 130	20
2-Chlorophenol	ND	73	74	1.4				30 - 130	20
2-Methylnaphthalene	ND	73	74	1.4				30 - 130	20
2-Methylphenol (o-cresol)	ND	85	84	1.2				30 - 130	20
2-Nitroaniline	ND	123	128	4.0				30 - 130	20
2-Nitrophenol	ND	80	78	2.5				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	80	79	1.3				30 - 130	20
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20
3-Nitroaniline	ND	>150	>150	NC				30 - 130	20
4,6-Dinitro-2-methylphenol	ND	85	90	5.7				30 - 130	20
4-Bromophenyl phenyl ether	ND	76	74	2.7				30 - 130	20
4-Chloro-3-methylphenol	ND	90	91	1.1				30 - 130	20
4-Chloroaniline	ND	98	102	4.0				30 - 130	20
4-Chlorophenyl phenyl ether	ND	77	77	0.0				30 - 130	20
4-Nitroaniline	ND	92	92	0.0				30 - 130	20
4-Nitrophenol	ND	86	89	3.4				30 - 130	20
Acenaphthene	ND	74	74	0.0				30 - 130	20
Acenaphthylene	ND	74	73	1.4				30 - 130	20
Acetophenone	ND	39	39	0.0				30 - 130	20
Aniline	ND	N/A	N/A	NC				30 - 130	20
Anthracene	ND	78	78	0.0				30 - 130	20
Azobenzene	ND	40	41	2.5				30 - 130	20
Benz(a)anthracene	ND	86	85	1.2				30 - 130	20
Benzidine	ND	N/A	N/A	NC				30 - 130	20
Benzo(a)pyrene	ND	69	68	1.5				30 - 130	20
Benzo(b)fluoranthene	ND	74	73	1.4				30 - 130	20
Benzo(ghi)perylene	ND	86	84	2.4				30 - 130	20
Benzo(k)fluoranthene	ND	76	78	2.6				30 - 130	20
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20
Benzyl butyl phthalate	ND	98	93	5.2				30 - 130	20
Bis(2-chloroethoxy)methane	ND	79	78	1.3				30 - 130	20
Bis(2-chloroethyl)ether	ND	67	69	2.9				30 - 130	20
Bis(2-chloroisopropyl)ether	ND	85	86	1.2				30 - 130	20
Bis(2-ethylhexyl)phthalate	ND	100	95	5.1				30 - 130	20
Carbazole	ND	100	100	0.0				30 - 130	20
Chrysene	ND	78	78	0.0				30 - 130	20
Dibenz(a,h)anthracene	ND	87	84	3.5				30 - 130	20
Dibenzofuran	ND	75	76	1.3				30 - 130	20

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Diethyl phthalate	ND	85	84	1.2				30 - 130	20	
Dimethylphthalate	ND	80	80	0.0				30 - 130	20	
Di-n-butylphthalate	ND	98	95	3.1				30 - 130	20	
Di-n-octylphthalate	ND	104	100	3.9				30 - 130	20	
Fluoranthene	ND	76	76	0.0				30 - 130	20	
Fluorene	ND	77	79	2.6				30 - 130	20	
Hexachlorobenzene	ND	80	78	2.5				30 - 130	20	
Hexachlorobutadiene	ND	67	67	0.0				30 - 130	20	
Hexachlorocyclopentadiene	ND	45	45	0.0				30 - 130	20	
Hexachloroethane	ND	72	71	1.4				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	86	84	2.4				30 - 130	20	
Isophorone	ND	83	83	0.0				30 - 130	20	
Naphthalene	ND	74	74	0.0				30 - 130	20	
Nitrobenzene	ND	83	84	1.2				30 - 130	20	
N-Nitrosodimethylamine	ND	63	63	0.0				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	86	86	0.0				30 - 130	20	
N-Nitrosodiphenylamine	ND	75	76	1.3				30 - 130	20	
Pentachloronitrobenzene	ND	87	84	3.5				30 - 130	20	
Pentachlorophenol	ND	70	69	1.4				30 - 130	20	
Phenanthrene	ND	81	80	1.2				30 - 130	20	
Phenol	ND	69	69	0.0				30 - 130	20	
Pyrene	ND	78	80	2.5				30 - 130	20	
Pyridine	ND	<5	<5	NC				30 - 130	20	I
% 2,4,6-Tribromophenol	122	88	88	0.0				15 - 130	20	
% 2-Fluorobiphenyl	76	67	65	3.0				30 - 130	20	
% 2-Fluorophenol	68	60	59	1.7				15 - 130	20	
% Nitrobenzene-d5	84	77	78	1.3				30 - 130	20	
% Phenol-d5	69	64	63	1.6				15 - 130	20	
% Terphenyl-d14	115	89	89	0.0				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 200426, QC Sample No: BB82290 (BB82289, BB82290)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	93	92	1.1	83	80	3.7	70 - 130	30	
1,1,1-Trichloroethane	ND	109	107	1.9	104	97	7.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	94	96	2.1	88	93	5.5	70 - 130	30	
1,1,2-Trichloroethane	ND	105	104	1.0	99	95	4.1	70 - 130	30	
1,1-Dichloroethane	ND	105	108	2.8	97	94	3.1	70 - 130	30	
1,1-Dichloroethene	ND	103	100	3.0	99	94	5.2	70 - 130	30	
1,1-Dichloropropene	ND	105	96	9.0	96	87	9.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	144	133	7.9	111	126	12.7	70 - 130	30	I
1,2,3-Trichloropropane	ND	99	96	3.1	87	97	10.9	70 - 130	30	
1,2,4-Trichlorobenzene	ND	137	133	3.0	111	126	12.7	70 - 130	30	I
1,2,4-Trimethylbenzene	ND	98	99	1.0	87	86	1.2	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	127	130	2.3	112	125	11.0	70 - 130	30	
1,2-Dichlorobenzene	ND	126	102	21.1	92	93	1.1	70 - 130	30	
1,2-Dichloroethane	ND	107	107	0.0	101	98	3.0	70 - 130	30	
1,2-Dichloropropane	ND	104	104	0.0	95	89	6.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	102	101	1.0	88	87	1.1	70 - 130	30	
1,3-Dichlorobenzene	ND	95	95	0.0	84	85	1.2	70 - 130	30	

QA/QC Data

SDG I.D.: GBB82285

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3-Dichloropropane	ND	110	110	0.0	99	98	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	102	103	1.0	93	95	2.1	70 - 130	30	
2,2-Dichloropropane	ND	57	56	1.8	40	<40	NC	70 - 130	30	l,m
2-Chlorotoluene	ND	102	100	2.0	92	94	2.2	70 - 130	30	
2-Hexanone	ND	104	117	11.8	109	102	6.6	70 - 130	30	
2-Isopropyltoluene	ND	97	95	2.1	94	92	2.2	70 - 130	30	
4-Chlorotoluene	ND	95	95	0.0	84	85	1.2	70 - 130	30	
4-Methyl-2-pentanone	ND	111	119	7.0	109	113	3.6	70 - 130	30	
Acetone	ND	115	117	1.7	106	115	8.1	70 - 130	30	
Acrylonitrile	ND	104	100	3.9	107	95	11.9	70 - 130	30	
Benzene	ND	102	102	0.0	93	87	6.7	70 - 130	30	
Bromobenzene	ND	117	114	2.6	108	113	4.5	70 - 130	30	
Bromochloromethane	ND	104	110	5.6	97	96	1.0	70 - 130	30	
Bromodichloromethane	ND	107	108	0.9	98	95	3.1	70 - 130	30	
Bromoform	ND	91	89	2.2	74	75	1.3	70 - 130	30	
Bromomethane	ND	94	79	17.3	52	63	19.1	70 - 130	30	m
Carbon Disulfide	ND	95	96	1.0	88	82	7.1	70 - 130	30	
Carbon tetrachloride	ND	109	101	7.6	103	92	11.3	70 - 130	30	
Chlorobenzene	ND	98	97	1.0	90	87	3.4	70 - 130	30	
Chloroethane	ND	104	106	1.9	96	92	4.3	70 - 130	30	
Chloroform	ND	106	109	2.8	99	96	3.1	70 - 130	30	
Chloromethane	ND	100	102	2.0	65	90	32.3	70 - 130	30	m,r
cis-1,2-Dichloroethene	ND	105	108	2.8	95	92	3.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	97	97	0.0	81	78	3.8	70 - 130	30	
Dibromochloromethane	ND	114	111	2.7	96	96	0.0	70 - 130	30	
Dibromoethane	ND	106	105	0.9	98	97	1.0	70 - 130	30	
Dibromomethane	ND	107	103	3.8	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	98	11.5	112	96	15.4	70 - 130	30	
Ethylbenzene	ND	93	92	1.1	82	78	5.0	70 - 130	30	
Hexachlorobutadiene	ND	127	112	12.6	117	112	4.4	70 - 130	30	
Isopropylbenzene	ND	97	94	3.1	84	82	2.4	70 - 130	30	
m&p-Xylene	ND	86	84	2.4	77	73	5.3	70 - 130	30	
Methyl ethyl ketone	ND	106	103	2.9	101	106	4.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	104	105	1.0	101	100	1.0	70 - 130	30	
Methylene chloride	ND	103	106	2.9	94	92	2.2	70 - 130	30	
Naphthalene	ND	>150	>150	NC	90	147	48.1	70 - 130	30	l,m,r
n-Butylbenzene	ND	105	95	10.0	81	82	1.2	70 - 130	30	
n-Propylbenzene	ND	99	97	2.0	94	95	1.1	70 - 130	30	
o-Xylene	ND	95	93	2.1	87	84	3.5	70 - 130	30	
p-Isopropyltoluene	ND	101	98	3.0	85	84	1.2	70 - 130	30	
sec-Butylbenzene	ND	95	91	4.3	86	83	3.6	70 - 130	30	
Styrene	ND	91	90	1.1	80	76	5.1	70 - 130	30	
tert-Butylbenzene	ND	99	97	2.0	93	92	1.1	70 - 130	30	
Tetrachloroethene	ND	107	101	5.8	99	91	8.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	97	106	8.9	100	102	2.0	70 - 130	30	
Toluene	ND	99	98	1.0	94	87	7.7	70 - 130	30	
trans-1,2-Dichloroethene	ND	105	106	0.9	96	92	4.3	70 - 130	30	
trans-1,3-Dichloropropene	ND	104	105	1.0	85	84	1.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	85	91	6.8	45	55	20.0	70 - 130	30	m
Trichloroethene	ND	104	101	2.9	95	89	6.5	70 - 130	30	
Trichlorofluoromethane	ND	128	118	8.1	109	100	8.6	70 - 130	30	
Trichlorotrifluoroethane	ND	100	89	11.6	102	91	11.4	70 - 130	30	
Vinyl chloride	ND	109	107	1.9	110	96	13.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% 1,2-dichlorobenzene-d4	100	121	99	20.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	119	100	98	2.0	106	110	3.7	70 - 130	30	
% Dibromofluoromethane	103	102	105	2.9	103	102	1.0	70 - 130	30	
% Toluene-d8	104	98	98	0.0	99	97	2.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200143, QC Sample No: BB82301 (BB82285, BB82286, BB82287, BB82288, BB82289)

Polychlorinated Biphenyls - Ground Water

PCB-1016	ND	77	74	4.0				40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	85	78	8.6				40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	
% DCBP (Surrogate Rec)	83	92	92	0.0				30 - 150	20	
% TCMX (Surrogate Rec)	63	70	70	0.0				30 - 150	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 200232, QC Sample No: BB82301 (BB82285, BB82286, BB82287, BB82288, BB82289)

TPH by GC (Extractable Products) - Ground Water

Ext. Petroleum HC	ND	96	91	5.3				50 - 150	20	
% n-Pentacosane	114	115	114	0.9				50 - 150	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 200323, QC Sample No: BB82304 (BB82285, BB82286, BB82287, BB82288)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	91	88	3.4	87	84	3.5	70 - 130	30	
1,1,1-Trichloroethane	ND	111	104	6.5	106	104	1.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	90	1.1	87	91	4.5	70 - 130	30	
1,1,2-Trichloroethane	ND	109	105	3.7	105	100	4.9	70 - 130	30	
1,1-Dichloroethane	ND	108	103	4.7	100	103	3.0	70 - 130	30	
1,1-Dichloroethene	ND	106	98	7.8	104	101	2.9	70 - 130	30	
1,1-Dichloropropene	ND	109	97	11.7	106	94	12.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	133	129	3.1	113	122	7.7	70 - 130	30	l
1,2,3-Trichloropropane	ND	100	96	4.1	98	91	7.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	122	121	0.8	114	119	4.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	101	94	7.2	93	90	3.3	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	104	110	5.6	107	115	7.2	70 - 130	30	
1,2-Dichlorobenzene	ND	102	96	6.1	98	94	4.2	70 - 130	30	
1,2-Dichloroethane	ND	105	103	1.9	103	104	1.0	70 - 130	30	
1,2-Dichloropropane	ND	109	103	5.7	102	99	3.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	103	96	7.0	94	91	3.2	70 - 130	30	
1,3-Dichlorobenzene	ND	95	90	5.4	90	89	1.1	70 - 130	30	
1,3-Dichloropropane	ND	109	107	1.9	101	102	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	103	100	3.0	97	95	2.1	70 - 130	30	
2,2-Dichloropropane	ND	82	75	8.9	58	56	3.5	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB82285

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Chlorotoluene	ND	100	94	6.2	96	95	1.0	70 - 130	30	
2-Hexanone	ND	116	117	0.9	95	114	18.2	70 - 130	30	
2-Isopropyltoluene	ND	99	92	7.3	99	96	3.1	70 - 130	30	
4-Chlorotoluene	ND	94	87	7.7	90	89	1.1	70 - 130	30	
4-Methyl-2-pentanone	ND	121	119	1.7	116	116	0.0	70 - 130	30	
Acetone	ND	112	109	2.7	103	128	21.6	70 - 130	30	
Acrylonitrile	ND	99	106	6.8	102	98	4.0	70 - 130	30	
Benzene	ND	108	101	6.7	101	96	5.1	70 - 130	30	
Bromobenzene	ND	108	105	2.8	109	111	1.8	70 - 130	30	
Bromochloromethane	ND	107	104	2.8	100	97	3.0	70 - 130	30	
Bromodichloromethane	ND	109	105	3.7	108	103	4.7	70 - 130	30	
Bromoform	ND	88	90	2.2	84	82	2.4	70 - 130	30	
Bromomethane	ND	83	100	18.6	66	89	29.7	70 - 130	30	m
Carbon Disulfide	ND	102	95	7.1	94	94	0.0	70 - 130	30	
Carbon tetrachloride	ND	110	99	10.5	112	101	10.3	70 - 130	30	
Chlorobenzene	ND	98	94	4.2	95	92	3.2	70 - 130	30	
Chloroethane	ND	111	103	7.5	99	101	2.0	70 - 130	30	
Chloroform	ND	108	102	5.7	102	102	0.0	70 - 130	30	
Chloromethane	ND	104	103	1.0	65	64	1.6	70 - 130	30	m
cis-1,2-Dichloroethene	ND	107	102	4.8	99	99	0.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	108	103	4.7	98	96	2.1	70 - 130	30	
Dibromochloromethane	ND	110	107	2.8	101	101	0.0	70 - 130	30	
Dibromoethane	ND	109	103	5.7	105	103	1.9	70 - 130	30	
Dibromomethane	ND	107	103	3.8	102	100	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	115	100	14.0	120	110	8.7	70 - 130	30	
Ethylbenzene	ND	93	86	7.8	88	83	5.8	70 - 130	30	
Hexachlorobutadiene	ND	112	104	7.4	124	111	11.1	70 - 130	30	
Isopropylbenzene	ND	101	94	7.2	92	86	6.7	70 - 130	30	
m&p-Xylene	ND	86	82	4.8	83	78	6.2	70 - 130	30	
Methyl ethyl ketone	ND	106	108	1.9	101	109	7.6	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	107	104	2.8	102	102	0.0	70 - 130	30	
Methylene chloride	ND	105	104	1.0	96	100	4.1	70 - 130	30	
Naphthalene	ND	143	>150	NC	93	140	40.3	70 - 130	30	l,m,r
n-Butylbenzene	ND	99	93	6.3	91	87	4.5	70 - 130	30	
n-Propylbenzene	ND	99	92	7.3	101	96	5.1	70 - 130	30	
o-Xylene	ND	92	88	4.4	92	88	4.4	70 - 130	30	
p-Isopropyltoluene	ND	102	96	6.1	93	89	4.4	70 - 130	30	
sec-Butylbenzene	ND	98	91	7.4	93	89	4.4	70 - 130	30	
Styrene	ND	92	88	4.4	84	83	1.2	70 - 130	30	
tert-Butylbenzene	ND	99	92	7.3	99	94	5.2	70 - 130	30	
Tetrachloroethene	ND	107	99	7.8	106	95	10.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	109	109	0.0	92	109	16.9	70 - 130	30	
Toluene	ND	105	97	7.9	103	96	7.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	109	102	6.6	101	100	1.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	112	109	2.7	102	102	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	103	0.0	70	86	20.5	70 - 130	30	
Trichloroethene	ND	103	96	7.0	99	94	5.2	70 - 130	30	
Trichlorofluoromethane	ND	127	116	9.1	112	105	6.5	70 - 130	30	
Trichlorotrifluoroethane	ND	102	90	12.5	109	98	10.6	70 - 130	30	
Vinyl chloride	ND	111	101	9.4	115	105	9.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	97	97	0.0	103	98	5.0	70 - 130	30	
% Bromofluorobenzene	119	86	89	3.4	103	108	4.7	70 - 130	30	
% Dibromofluoromethane	96	103	100	3.0	98	105	6.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB82285

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Toluene-d8	108	102	101	1.0	105	102	2.9	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 20, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB82285

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB82285	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82285	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB82285	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB82285	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB82285	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.007	0.004	0.004	0.004	mg/L
BB82286	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82286	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB82286	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB82286	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB82286	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.008	0.004	0.004	0.004	mg/L
BB82287	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82287	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB82287	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB82287	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB82287	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.13	0.050	0.077	0.077	ug/L
BB82287	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.008	0.004	0.004	0.004	mg/L
BB82288	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82288	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB82288	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB82288	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB82288	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.009	0.004	0.004	0.004	mg/L
BB82289	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82289	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB82289	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB82289	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB82290	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB82290	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB82285, BB82286, BB82287, BB82288, BB82289, BB82290

Sampling Date(s): 5/4/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Sunday, May 20, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWP criteria.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-xl1 05/10/12-1 (BB82285, BB82286, BB82287)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/10/2012

Instrument: Au-xl1 05/10/12-2 (BB82288, BB82289)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/10/2012

QC Comments: QC Batch 00232 05/08/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

QC (Batch Specific)

---------- Sample No: BB82301, QA/QC Batch: 200232 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/09/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

Initial Calibration ECD14-050412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/9/2012

QC Comments: QC Batch 99956 05/04/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB80634, QA/QC Batch: 199956 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/08/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/8/2012

QC (Site Specific)

---------- Sample No: BB82287, QA/QC Batch: 200179 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 05/08/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/8/2012

Instrument: Icp9 05/09/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/9/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

Instrument: Icp9 05/15/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/15/2012

QC (Batch Specific)

---------- Sample No: BB78237, QA/QC Batch: 200147 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB82571, QA/QC Batch: 200457 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd2 05/08/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/8/2012

Instrument: Au-ecd2 05/09/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

8082 Narration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Keith Aloisa
Position: Chemist
Date: 5/9/2012

QC Comments: QC Batch 00143 05/07/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB82301, QA/QC Batch: 200143 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 05/08/12-1 (BB82285, BB82286, BB82287, BB82288, BB82289)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/8/2012

QC Comments: QC Batch 00144 05/07/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

QC (Site Specific)

---------- Sample No: BB82285, QA/QC Batch: 200144 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200131 (Samples: BB82285, BB82286, BB82287, BB82288, BB82289): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Compunds listed below)

The LCS and/or LCSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

Instrument: Chem07 05/09/12-1 (BB82285, BB82287, BB82288, BB82289)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/SV_0410):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrophenol, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, 4-Chloroaniline, 3-Nitroaniline, 2-Nitroaniline, 4,6-Dinitro-2-methylphenol, Atrazine, Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 5/9/2012

Instrument: Chem12 05/09/12-1 (BB82285, BB82286)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 5/9/2012

QC Comments: QC Batch 00131 05/07/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB82285, QA/QC Batch: 200131 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 3-Nitroaniline(>150%), Pyridine(<5%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 3-Nitroaniline(>150%), Pyridine(<5%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 05/08/12-1 (BB82287, BB82288, BB82289)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0424):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: % 2,4,6-Tribromophenol, Pentachloronitrobenzene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

Printed Name Damien Drobinski
Position: Chemist
Date: 5/8/2012

Instrument: Chem04 05/09/12-1 (BB82285, BB82286)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0424):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-nitrosodimethylamine, % 2,4,6-Tribromophenol, Pentachloronitrobenzene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/9/2012

QC Comments: QC Batch 00131 05/07/12 (BB82285, BB82286, BB82287, BB82288, BB82289)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 200323 (Samples: BB82285, BB82286, BB82287, BB82288): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Compunds listed below)

QC Batch 200426 (Samples: BB82289, BB82290): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

Instrument: Chem02 05/08/12-1 (BB82285, BB82286, BB82287, BB82288)

P-Side
Initial Calibration (RPP_0508):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Toluene, 2-hexanone, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, Naphthalene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations >30%: Chloromethane

Printed Name Tina Covensky
Position: Chemist
Date: 5/8/2012

Instrument: Chem02 05/08/12-2 (BB82289, BB82290)

P-Side
Initial Calibration (RPP_0508):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Toluene, 2-hexanone, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, Naphthalene

Continuing Calibration Verification:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 20, 2012

SDG I.D.: GBB82285

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations >30%: 2,2-Dichloropropane

Printed Name Tina Covensky
Position: Chemist
Date: 5/8/2012

QC Comments: QC Batch 00323 05/09/12 (BB82285, BB82286, BB82287, BB82288)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 00426 05/10/12 (BB82289, BB82290)

A blank MS/MSD was analyzed with this batch.

QC (Site Specific)

---------- Sample No: BB82290, QA/QC Batch: 200426 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(144%), 1,2,4-Trichlorobenzene(137%), 2,2-Dichloropropane(57%), Naphthalene(>150%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(133%), 1,2,4-Trichlorobenzene(133%), 2,2-Dichloropropane(56%), Naphthalene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(40%), Bromomethane(52%), Chloromethane(65%), trans-1,4-dichloro-2-butene(45%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(<40%), Bromomethane(63%), Naphthalene(147%), trans-1,4-dichloro-2-butene(55%)

All MS/MSD RPDs were less than 30% with the following exceptions: Chloromethane(32.3%), Naphthalene(48.1%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB82304, QA/QC Batch: 200323 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(133%), Naphthalene(143%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Naphthalene(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370. Manchester. CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 (NIC) Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill, CT 06067

Project: Metro North Railroad Catenary
Report to: Jane Witherell
Invoice to: DAS Contract – CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Sampler's Signature: [signature] Date: 5-4-12

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 Metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [✓] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
82285	GP-28 GW	GW	5-4-12	6:49am	✓	✓	✓	✓	✓	✓	✓						3	6			2
82286	GP-30 GW	↓	↓	7:38am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
82287	GP-56 GW	↓	↓	10:11am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
82288	GP-58 GW	↓	↓	11:34am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
82289	FB-2	↓	↓	1:34pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
82290	TB-11	↓	↓	–	↓												2				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5-7-12	13:40
[signature]	Claudice	5/7/12	14:20

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☒ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

PHOENIX
Environmental Laboratories, Inc.

Thursday, May 17, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Sample ID#s: BB81649 - BB81652

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/03/12	6:32
Location Code:	MAGU-DAS	Received by:	LB	05/04/12	12:36
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB81649
Phoenix ID: BB81649

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-7 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/08/12		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/08/12		EK	6010
Barium	0.075	0.002	mg/L	05/08/12		EK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/08/12		EK	6010
Chromium	0.001	0.001	mg/L	05/08/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/10/12		LK	6010/200.7
Barium (Dissolved)	0.059	0.002	mg/L	05/10/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/10/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	05/08/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/08/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/04/12		AG	SW846-3005
Total Metals Digestion	Completed			05/04/12		AG	
Extraction of CT ETPH	Completed			05/09/12		F/e	3510/3520
Filtration	Completed			05/04/12		AG	0.45um Filter
Dissolved Mercury Digestion	Completed			05/07/12		X/X	SW7470
Mercury Digestion	Completed			05/07/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/04/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			05/04/12		L	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-7 GW

Phoenix I.D.: BB81649

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	67		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	96		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	54		%	05/07/12		MH	30 - 150 %
% TCMX	70		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-7 GW

Phoenix I.D.: BB81649

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	58		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	77		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/08/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Acetone	ND	25	ug/L	05/08/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/08/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/08/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/08/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/08/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/08/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/08/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/08/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/08/12		R/T	70 - 130 %
% Bromofluorobenzene	95		%	05/08/12		R/T	70 - 130 %
% Dibromofluoromethane	103		%	05/08/12		R/T	70 - 130 %
% Toluene-d8	102		%	05/08/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-7 GW

Phoenix I.D.: BB81649

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	10	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	5	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	78		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/08/12		DD	15 - 130 %
% Phenol-d5	16		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	74		%	05/08/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Phoenix I.D.: BB81649

Client ID: GP-7 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Acenaphthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.04	0.040	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	128		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	78		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/07/12		DD	15 - 130 %
% Phenol-d5	16		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	74		%	05/07/12		DD	15 - 130 %

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/03/12	8:19
Location Code:	MAGU-DAS	Received by:	LB	05/04/12	12:36
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB81649
Phoenix ID: BB81650

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-24 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/08/12		EK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/08/12		EK	6010
Barium	0.046	0.002	mg/L	05/08/12		EK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/08/12		EK	6010
Chromium	0.021	0.001	mg/L	05/08/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/10/12		LK	6010/200.7
Barium (Dissolved)	0.112	0.002	mg/L	05/10/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead	0.007	0.002	mg/L	05/08/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/08/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/04/12		AG	SW846-3005
Total Metals Digestion	Completed			05/04/12		AG	
Extraction of CT ETPH	Completed			05/09/12		F/E	3510/3520
Filtration	Completed			05/04/12		AG	0.45um Filter
Dissolved Mercury Digestion	Completed			05/07/12		X/X	SW7470
Mercury Digestion	Completed			05/07/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/04/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			05/04/12		L	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-24 GW

Phoenix I.D.: BB81650

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	63		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	100		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	35		%	05/07/12		MH	30 - 150 %
% TCMX	63		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.003	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-24 GW

Phoenix I.D.: BB81650

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	43		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	66		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/08/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Acetone	ND	25	ug/L	05/08/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/08/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/08/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/08/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/08/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/08/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/08/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/08/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/08/12		R/T	70 - 130 %
% Bromofluorobenzene	94		%	05/08/12		R/T	70 - 130 %
% Dibromofluoromethane	102		%	05/08/12		R/T	70 - 130 %
% Toluene-d8	102		%	05/08/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT Phoenix I.D.: BB81650
Client ID: GP-24 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	10	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	5	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	130		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/08/12		DD	15 - 130 %
% Phenol-d5	67		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	71		%	05/08/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-24 GW

Phoenix I.D.: BB81650

Parameter	Result	RL	Units	Date	Time	By	Reference
Acenaphthene	0.42	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	0.09	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.07	0.040	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.05	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.06	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	1.4	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	130		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/07/12		DD	15 - 130 %
% Phenol-d5	67		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	71		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/03/12	9:47
Location Code:	MAGU-DAS	Received by:	LB	05/04/12	12:36
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB81649
Phoenix ID: BB81651

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-26 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/08/12		EK	6010/200.7
Arsenic	0.023	0.004	mg/L	05/08/12		EK	6010
Barium	0.522	0.002	mg/L	05/08/12		EK	6010/200.7
Cadmium	0.004	0.001	mg/L	05/08/12		EK	6010
Chromium	0.160	0.001	mg/L	05/08/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/10/12		LK	6010/200.7
Barium (Dissolved)	0.120	0.002	mg/L	05/10/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead	0.099	0.002	mg/L	05/08/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/08/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/04/12		AG	SW846-3005
Total Metals Digestion	Completed			05/04/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Filtration	Completed			05/04/12		AG	0.45um Filter
Dissolved Mercury Digestion	Completed			05/07/12		X/X	SW7470
Mercury Digestion	Completed			05/07/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/04/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			05/04/12		L	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-26 GW

Phoenix I.D.: BB81651

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	69		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	107		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	43		%	05/07/12		MH	30 - 150 %
% TCMX	77		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.005	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-26 GW

Phoenix I.D.: BB81651

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	41		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	68		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/08/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Acetone	ND	25	ug/L	05/08/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/08/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/08/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/08/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/08/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/08/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/08/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/08/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/08/12		R/T	70 - 130 %
% Bromofluorobenzene	95		%	05/08/12		R/T	70 - 130 %
% Dibromofluoromethane	101		%	05/08/12		R/T	70 - 130 %
% Toluene-d8	101		%	05/08/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT Phoenix I.D.: BB81651
Client ID: GP-26 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	10	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	5	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	126		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/08/12		DD	15 - 130 %
% Phenol-d5	69		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	68		%	05/08/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-26 GW

Phoenix I.D.: BB81651

Parameter	Result	RL	Units	Date	Time	By	Reference
Acenaphthene	0.34	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	0.07	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.07	0.040	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(a)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.06	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.06	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	1.2	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	126		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/07/12		DD	15 - 130 %
% Phenol-d5	69		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	68		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/03/12	11:09
Location Code:	MAGU-DAS	Received by:	LB	05/04/12	12:36
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB81649
Phoenix ID: BB81652

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-36 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/08/12		EK	6010/200.7
Arsenic	0.052	0.004	mg/L	05/08/12		EK	6010
Barium	0.849	0.002	mg/L	05/08/12		EK	6010/200.7
Cadmium	0.008	0.001	mg/L	05/08/12		EK	6010
Chromium	0.313	0.001	mg/L	05/08/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/15/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/10/12		LK	6010/200.7
Barium (Dissolved)	0.120	0.002	mg/L	05/10/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/10/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/15/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/10/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/07/12		RS	7470/E245.1
Lead	0.179	0.002	mg/L	05/15/12		EK	6010
Selenium	< 0.010	0.010	mg/L	05/15/12		EK	6010/200.7
Dissolved Metals Preparation	Completed			05/04/12		AG	SW846-3005
Total Metals Digestion	Completed			05/04/12		AG	
Extraction of CT ETPH	Completed			05/09/12		/E	3510/3520
Filtration	Completed			05/04/12		AG	0.45um Filter
Dissolved Mercury Digestion	Completed			05/07/12		X/X	SW7470
Mercury Digestion	Completed			05/07/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/08/12		D/D	SW8151
PCB Extraction	Completed			05/04/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			05/04/12		L	SW3510
Semi-Volatile Extraction	Completed			05/04/12		F/D	SW3520

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-36 GW

Phoenix I.D.: BB81652

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/09/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/09/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/09/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/09/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/09/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	69		%	05/09/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	103		%	05/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/07/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/07/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	46		%	05/07/12		MH	30 - 150 %
% TCMX	89		%	05/07/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/08/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/08/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/08/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/08/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/08/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/08/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/08/12		KCA	SW8081
Dieldrin	0.011	0.002	ug/L	05/08/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/08/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/08/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/08/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/08/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT
Client ID: GP-36 GW

Phoenix I.D.: BB81652

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	0.05	ug/L	05/08/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/08/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/08/12		KCA	SW8081
Toxaphene	ND	1.0	ug/L	05/08/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	46		%	05/08/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	69		%	05/08/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/08/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Acetone	ND	25	ug/L	05/08/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/08/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/08/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/08/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/08/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/08/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/08/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/08/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/08/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/08/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/08/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/08/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/08/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/08/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/08/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/08/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/08/12		R/T	70 - 130 %
% Bromofluorobenzene	95		%	05/08/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	05/08/12		R/T	70 - 130 %
% Toluene-d8	100		%	05/08/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/08/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/08/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/08/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT Phoenix I.D.: BB81652
Client ID: GP-36 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/08/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/08/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	10	ug/L	05/08/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/08/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/08/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/08/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/08/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/08/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/08/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/08/12		DD	SW8270
Aniline	ND	5	ug/L	05/08/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/08/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
Benzidine	ND	50	ug/L	05/08/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/08/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/08/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/08/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/08/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/08/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/08/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/08/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/08/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/08/12		DD	SW8270
Phenol	ND	10	ug/L	05/08/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/08/12		DD	SW8270
Pyridine	ND	0.5	ug/L	05/08/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/08/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/08/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/08/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/08/12		DD	15 - 130 %
% Phenol-d5	63		%	05/08/12		DD	15 - 130 %
% Terphenyl-d14	70		%	05/08/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CANTENARY PROJECT

Client ID: GP-36 GW

Phoenix I.D.: BB81652

Parameter	Result	RL	Units	Date	Time	By	Reference
Acenaphthene	1.6	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Acenaphthylene	0.46	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.48	0.040	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(a)pyrene	0.36	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.49	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	05/07/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.14	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/07/12		DD	SW8270 (SIM)
Chrysene	0.48	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.06	0.010	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	05/07/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	05/07/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.18	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	05/07/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	05/07/12		DD	SW8270 (SIM)
Phenanthrene	5.9	0.050	ug/L	05/07/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	129		%	05/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/07/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	05/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/07/12		DD	15 - 130 %
% Phenol-d5	63		%	05/07/12		DD	15 - 130 %
% Terphenyl-d14	70		%	05/07/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 17, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 17, 2012

QA/QC Data

SDG I.D.: GBB81649

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 200001, QC Sample No: BB81609 (BB81649, BB81650, BB81651)													
ICP Metals - Aqueous													
Arsenic	BDL	<0.004	<0.004	NC	93.1	94.2	1.2	111	108	2.7	75 - 125	20	
Barium	BDL	0.014	0.015	6.90	98.0	98.8	0.8	108	109	0.9	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	95.2	95.7	0.5	105	102	2.9	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	95.4	96.3	0.9	106	103	2.9	75 - 125	20	
Lead	BDL	<0.002	<0.002	NC	94.4	94.9	0.5	106	102	3.8	75 - 125	20	
Selenium	BDL	<0.010	<0.010	NC	89.7	90.3	0.7	101	98.3	2.7	75 - 125	20	
Silver	BDL	<0.002	<0.001	NC	95.5	96.1	0.6	102	102	0.0	75 - 125	20	
QA/QC Batch 200065, QC Sample No: BB81649 (BB81649, BB81650, BB81651, BB81652)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	88.4	81.5	8.1	100	96.7	3.4	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 200026, QC Sample No: BB81742 (BB81649, BB81650, BB81651, BB81652)													
ICP Metals - Dissolved													
Arsenic	BDL	<0.004	<0.004	NC	89.8	89.1	0.8	90.6	91.5	1.0	75 - 125	20	
Barium	BDL	0.008	0.008	NC	99.1	99.0	0.1	99.3	101	1.7	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	92.1	91.4	0.8	91.8	93.0	1.3	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	94.5	93.7	0.9	94.3	95.7	1.5	75 - 125	20	
Lead	BDL	<0.002	<0.002	NC	92.5	91.4	1.2	91.6	93.6	2.2	75 - 125	20	
Selenium	BDL	<0.011	<0.011	NC	86.3	85.0	1.5	86.3	87.2	1.0	75 - 125	20	
Silver	BDL	<0.001	<0.001	NC	90.7	93.7	3.3	34.7	34.1	1.7	75 - 125	20	m
QA/QC Batch 200031, QC Sample No: BB81760 (BB81652)													
ICP Metals - Aqueous													
Arsenic	BDL	<0.004	<0.004	NC	107	102	4.8	103	105	1.9	75 - 125	20	
Barium	BDL	0.005	0.005	NC	108	104	3.8	108	107	0.9	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	109	103	5.7	102	104	1.9	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	108	101	6.7	101	103	2.0	75 - 125	20	
Lead	BDL	<0.002	<0.002	NC	109	101	7.6	101	104	2.9	75 - 125	20	
Selenium	BDL	<0.010	<0.010	NC	99.4	95.8	3.7	96.0	97.9	2.0	75 - 125	20	
Silver	BDL	<0.002	<0.001	NC	102	97.8	4.2	102	98.9	3.1	75 - 125	20	

m = This parameter is outside laboratory ms/msd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 17, 2012

QA/QC Data

SDG I.D.: GBB81649

QA/QC Batch 200295, QC Sample No: BB79363 (BB81649, BB81650, BB81651, BB81652)

Volatiles - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	104	105	1.0	106	103	2.9	70 - 130	30	
1,1,1-Trichloroethane	ND	98	97	1.0	102	96	6.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	97	101	4.0	99	96	3.1	70 - 130	30	
1,1,2-Trichloroethane	ND	115	118	2.6	106	100	5.8	70 - 130	30	
1,1-Dichloroethane	ND	97	98	1.0	101	95	6.1	70 - 130	30	
1,1-Dichloroethene	ND	93	94	1.1	102	96	6.1	70 - 130	30	
1,1-Dichloropropene	ND	98	98	0.0	102	97	5.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	107	111	3.7	103	101	2.0	70 - 130	30	
1,2,3-Trichloropropane	ND	95	98	3.1	96	93	3.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	106	109	2.8	104	103	1.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	102	102	0.0	102	97	5.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	106	110	3.7	108	103	4.7	70 - 130	30	
1,2-Dichlorobenzene	ND	96	98	2.1	101	98	3.0	70 - 130	30	
1,2-Dichloroethane	ND	99	101	2.0	102	100	2.0	70 - 130	30	
1,2-Dichloropropane	ND	98	98	0.0	102	97	5.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	104	103	1.0	99	96	3.1	70 - 130	30	
1,3-Dichlorobenzene	ND	98	99	1.0	100	96	4.1	70 - 130	30	
1,3-Dichloropropane	ND	106	110	3.7	96	92	4.3	70 - 130	30	
1,4-Dichlorobenzene	ND	97	98	1.0	99	96	3.1	70 - 130	30	
2,2-Dichloropropane	ND	90	89	1.1	72	67	7.2	70 - 130	30	m
2-Chlorotoluene	ND	99	100	1.0	99	97	2.0	70 - 130	30	
2-Hexanone	ND	98	102	4.0	104	101	2.9	70 - 130	30	
2-Isopropyltoluene	ND	98	98	0.0	106	100	5.8	70 - 130	30	
4-Chlorotoluene	ND	96	98	2.1	98	95	3.1	70 - 130	30	
4-Methyl-2-pentanone	ND	107	117	8.9	105	102	2.9	70 - 130	30	
Acetone	ND	103	87	16.8	97	93	4.2	70 - 130	30	
Acrylonitrile	ND	109	109	0.0	118	113	4.3	70 - 130	30	
Benzene	ND	98	99	1.0	101	98	3.0	70 - 130	30	
Bromobenzene	ND	101	103	2.0	100	97	3.0	70 - 130	30	
Bromochloromethane	ND	98	100	2.0	102	98	4.0	70 - 130	30	
Bromodichloromethane	ND	99	100	1.0	102	98	4.0	70 - 130	30	
Bromoform	ND	103	106	2.9	106	104	1.9	70 - 130	30	
Bromomethane	ND	111	117	5.3	98	100	2.0	70 - 130	30	
Carbon Disulfide	ND	96	97	1.0	102	96	6.1	70 - 130	30	
Carbon tetrachloride	ND	100	98	2.0	103	100	3.0	70 - 130	30	
Chlorobenzene	ND	97	98	1.0	102	97	5.0	70 - 130	30	
Chloroethane	ND	95	94	1.1	97	89	8.6	70 - 130	30	
Chloroform	ND	97	99	2.0	103	95	8.1	70 - 130	30	
Chloromethane	ND	98	100	2.0	101	95	6.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	98	101	3.0	101	97	4.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	97	100	3.0	97	94	3.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBB81649

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Dibromochloromethane	ND	106	111	4.6	102	99	3.0	70 - 130	30
Dibromoethane	ND	104	106	1.9	93	90	3.3	70 - 130	30
Dibromomethane	ND	101	103	2.0	104	99	4.9	70 - 130	30
Dichlorodifluoromethane	ND	95	94	1.1	103	95	8.1	70 - 130	30
Ethylbenzene	ND	100	102	2.0	102	96	6.1	70 - 130	30
Hexachlorobutadiene	ND	101	100	1.0	104	99	4.9	70 - 130	30
Isopropylbenzene	ND	98	101	3.0	100	97	3.0	70 - 130	30
m&p-Xylene	ND	99	101	2.0	104	98	5.9	70 - 130	30
Methyl ethyl ketone	ND	98	88	10.8	94	93	1.1	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	99	100	1.0	103	104	1.0	70 - 130	30
Methylene chloride	ND	99	101	2.0	103	98	5.0	70 - 130	30
Naphthalene	ND	108	114	5.4	105	107	1.9	70 - 130	30
n-Butylbenzene	ND	102	103	1.0	104	97	7.0	70 - 130	30
n-Propylbenzene	ND	97	97	0.0	101	96	5.1	70 - 130	30
o-Xylene	ND	100	101	1.0	107	99	7.8	70 - 130	30
p-Isopropyltoluene	ND	104	105	1.0	102	97	5.0	70 - 130	30
sec-Butylbenzene	ND	97	98	1.0	101	96	5.1	70 - 130	30
Styrene	ND	100	103	3.0	106	101	4.8	70 - 130	30
tert-Butylbenzene	ND	97	99	2.0	102	97	5.0	70 - 130	30
Tetrachloroethene	ND	99	104	4.9	101	96	5.1	70 - 130	30
Tetrahydrofuran (THF)	ND	99	100	1.0	105	101	3.9	70 - 130	30
Toluene	ND	100	99	1.0	102	96	6.1	70 - 130	30
trans-1,2-Dichloroethene	ND	98	98	0.0	102	95	7.1	70 - 130	30
trans-1,3-Dichloropropene	ND	107	114	6.3	98	94	4.2	70 - 130	30
trans-1,4-dichloro-2-butene	ND	97	99	2.0	87	85	2.3	70 - 130	30
Trichloroethene	ND	99	97	2.0	100	96	4.1	70 - 130	30
Trichlorofluoromethane	ND	112	111	0.9	104	97	7.0	70 - 130	30
Trichlorotrifluoroethane	ND	93	90	3.3	104	102	1.9	70 - 130	30
Vinyl chloride	ND	98	98	0.0	102	94	8.2	70 - 130	30
% 1,2-dichlorobenzene-d4	100	99	100	1.0	101	103	2.0	70 - 130	30
% Bromofluorobenzene	94	99	100	1.0	100	104	3.9	70 - 130	30
% Dibromofluoromethane	99	101	101	0.0	103	100	3.0	70 - 130	30
% Toluene-d8	101	101	101	0.0	101	99	2.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199869, QC Sample No: BB79693 (BB81649, BB81650, BB81651, BB81652)

Polychlorinated Biphenyls - Ground Water

PCB-1016	ND	79	78	1.3	84	81	3.6	40 - 140	20
PCB-1221	ND							40 - 140	20
PCB-1232	ND							40 - 140	20
PCB-1242	ND							40 - 140	20
PCB-1248	ND							40 - 140	20
PCB-1254	ND							40 - 140	20
PCB-1260	ND	83	82	1.2	93	89	4.4	40 - 140	20
PCB-1262	ND							40 - 140	20
PCB-1268	ND							40 - 140	20
% DCBP (Surrogate Rec)	92	91	97	6.4	90	85	5.7	30 - 150	20
% TCMX (Surrogate Rec)	72	73	72	1.4	77	72	6.7	30 - 150	20

QA/QC Data

SDG I.D.: GBB81649

QA/QC Batch 199755, QC Sample No: BB79767 (BB81649, BB81650, BB81651, BB81652)

Pesticides - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDD	ND	87	83	4.7				40 - 140	20
4,4' -DDE	ND	88	84	4.7				40 - 140	20
4,4' -DDT	ND	91	87	4.5				40 - 140	20
a-BHC	ND	84	82	2.4				40 - 140	20
a-Chlordane	ND	70	67	4.4				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	79	76	3.9				40 - 140	20
b-BHC	ND	83	80	3.7				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	96	93	3.2				40 - 140	20
Dieldrin	ND	85	83	2.4				40 - 140	20
Endosulfan I	ND	81	80	1.2				40 - 140	20
Endosulfan II	ND	89	86	3.4				40 - 140	20
Endosulfan sulfate	ND	79	76	3.9				40 - 140	20
Endrin	ND	90	88	2.2				40 - 140	20
Endrin aldehyde	ND	89	89	0.0				40 - 140	20
Endrin ketone	ND	92	89	3.3				40 - 140	20
g-BHC	ND	85	83	2.4				40 - 140	20
g-Chlordane	ND	84	81	3.6				40 - 140	20
Heptachlor	ND	94	88	6.6				40 - 140	20
Heptachlor epoxide	ND	82	79	3.7				40 - 140	20
Methoxychlor	ND	102	99	3.0				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	89	100	100	0.0				30 - 150	20
% TCMX	76	85	85	0.0				30 - 150	20

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Batch 199838, QC Sample No: BB80503 (BB81649, BB81650, BB81651, BB81652)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	34	35	2.9				30 - 130	20
1,2,4-Trichlorobenzene	ND	58	56	3.5				30 - 130	20
1,2-Dichlorobenzene	ND	67	65	3.0				30 - 130	20
1,3-Dichlorobenzene	ND	62	61	1.6				30 - 130	20
1,4-Dichlorobenzene	ND	67	62	7.8				30 - 130	20
2,4,5-Trichlorophenol	ND	77	78	1.3				30 - 130	20
2,4,6-Trichlorophenol	ND	76	78	2.6				30 - 130	20
2,4-Dichlorophenol	ND	70	67	4.4				30 - 130	20
2,4-Dimethylphenol	ND	46	45	2.2				30 - 130	20
2,4-Dinitrophenol	ND	19	19	0.0				30 - 130	20
2,4-Dinitrotoluene	ND	76	78	2.6				30 - 130	20
2,6-Dinitrotoluene	ND	78	78	0.0				30 - 130	20
2-Chloronaphthalene	ND	67	70	4.4				30 - 130	20
2-Chlorophenol	ND	73	72	1.4				30 - 130	20
2-Methylnaphthalene	ND	63	61	3.2				30 - 130	20
2-Methylphenol (o-cresol)	ND	75	74	1.3				30 - 130	20
2-Nitroaniline	ND	130	133	2.3				30 - 130	20
2-Nitrophenol	ND	61	62	1.6				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	69	69	0.0				30 - 130	20
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20

QA/QC Data

SDG I.D.: GBB81649

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
3-Nitroaniline	ND	133	131	1.5				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	67	68	1.5				30 - 130	20	
4-Bromophenyl phenyl ether	ND	72	76	5.4				30 - 130	20	
4-Chloro-3-methylphenol	ND	76	78	2.6				30 - 130	20	
4-Chloroaniline	ND	89	91	2.2				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	75	75	0.0				30 - 130	20	
4-Nitroaniline	ND	85	84	1.2				30 - 130	20	
4-Nitrophenol	ND	86	89	3.4				30 - 130	20	
Acenaphthene	ND	73	73	0.0				30 - 130	20	
Acenaphthylene	ND	72	74	2.7				30 - 130	20	
Acetophenone	ND	35	35	0.0				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	80	81	1.2				30 - 130	20	
Azobenzene	ND	39	39	0.0				30 - 130	20	
Benz(a)anthracene	ND	82	81	1.2				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	75	76	1.3				30 - 130	20	
Benzo(b)fluoranthene	ND	80	82	2.5				30 - 130	20	
Benzo(ghi)perylene	ND	77	79	2.6				30 - 130	20	
Benzo(k)fluoranthene	ND	81	82	1.2				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	87	88	1.1				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	70	71	1.4				30 - 130	20	
Bis(2-chloroethyl)ether	ND	72	68	5.7				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	80	75	6.5				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	95	96	1.0				30 - 130	20	
Carbazole	ND	100	100	0.0				30 - 130	20	
Chrysene	ND	78	81	3.8				30 - 130	20	
Dibenz(a,h)anthracene	ND	77	79	2.6				30 - 130	20	
Dibenzofuran	ND	73	73	0.0				30 - 130	20	
Diethyl phthalate	ND	81	83	2.4				30 - 130	20	
Dimethylphthalate	ND	79	79	0.0				30 - 130	20	
Di-n-butylphthalate	ND	87	87	0.0				30 - 130	20	
Di-n-octylphthalate	ND	96	97	1.0				30 - 130	20	
Fluoranthene	ND	76	79	3.9				30 - 130	20	
Fluorene	ND	75	76	1.3				30 - 130	20	
Hexachlorobenzene	ND	74	77	4.0				30 - 130	20	
Hexachlorobutadiene	ND	55	54	1.8				30 - 130	20	
Hexachlorocyclopentadiene	ND	23	24	4.3				30 - 130	20	I
Hexachloroethane	ND	62	62	0.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	76	77	1.3				30 - 130	20	
Isophorone	ND	70	68	2.9				30 - 130	20	
Naphthalene	ND	64	63	1.6				30 - 130	20	
Nitrobenzene	ND	73	71	2.8				30 - 130	20	
N-Nitrosodimethylamine	ND	49	48	2.1				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	67	67	0.0				30 - 130	20	
N-Nitrosodiphenylamine	ND	84	84	0.0				30 - 130	20	
Pentachloronitrobenzene	ND	79	81	2.5				30 - 130	20	
Pentachlorophenol	ND	47	53	12.0				30 - 130	20	
Phenanthrene	ND	80	80	0.0				30 - 130	20	
Phenol	ND	68	67	1.5				30 - 130	20	
Pyrene	ND	79	79	0.0				30 - 130	20	
Pyridine	ND	14	14	0.0				30 - 130	20	I

QA/QC Data

SDG I.D.: GBB81649

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% 2,4,6-Tribromophenol	113	81	78	3.8				15 - 130	20
% 2-Fluorobiphenyl	73	64	65	1.6				30 - 130	20
% 2-Fluorophenol	69	62	62	0.0				15 - 130	20
% Nitrobenzene-d5	83	70	69	1.4				30 - 130	20
% Phenol-d5	71	68	66	3.0				15 - 130	20
% Terphenyl-d14	119	88	89	1.1				30 - 130	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 199956, QC Sample No: BB80634 (BB81649, BB81650, BB81651, BB81652)

Chlorinated Herbicides - Ground Water

2,4,5-T	ND	76	88	14.6				40 - 140	20
2,4,5-TP (Silvex)	ND	73	84	14.0				40 - 140	20
2,4-D	ND	75	86	13.7				40 - 140	20
2,4-DB	ND	96	88	8.7				40 - 140	20
Dalapon	ND	61	72	16.5				40 - 140	20
Dicamba	ND	70	79	12.1				40 - 140	20
Dichloroprop	ND	64	72	11.8				40 - 140	20
Dinoseb	ND	78	85	8.6				40 - 140	20
% DCAA (Surrogate Rec)	75	59	65	9.7				30 - 150	20

Comment:

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 200232, QC Sample No: BB82301 (BB81649, BB81650, BB81651, BB81652)

TPH by GC (Extractable Products) - Ground Water

Ext. Petroleum HC	ND	96	91	5.3				50 - 150	20
% n-Pentacosane	114	115	114	0.9				50 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 17, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB81649

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB81649	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB81649	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB81650	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB81650	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB81650	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	1.4	0.050	0.077	0.077	ug/L
BB81650	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.07	0.040	0.06	0.06	ug/L
BB81650	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.003	0.002	0.002	0.002	ug/L
BB81651	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB81651	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB81651	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	1.2	0.050	0.077	0.077	ug/L
BB81651	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.07	0.040	0.06	0.06	ug/L
BB81651	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.005	0.002	0.002	0.002	ug/L
BB81651	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.023	0.004	0.01	0.01	mg/L
BB81651	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.023	0.004	0.004	0.004	mg/L
BB81651	MAGU-DAS	CR-WM	Chromium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.160	0.001	0.1	0.1	mg/L
BB81651	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.099	0.002	0.015	0.015	mg/L
BB81651	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.099	0.002	0.013	0.013	mg/L
BB81652	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB81652	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Acenaphthylene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.46	0.050	0.3	0.3	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	5.9	0.050	0.077	0.077	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.48	0.040	0.06	0.06	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.48	0.040	0.3	0.3	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.49	0.050	0.08	0.08	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.49	0.050	0.3	0.3	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.36	0.050	0.2	0.2	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.36	0.050	0.3	0.3	ug/L
BB81652	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.06	0.010	0.01	0.01	ug/L
BB81652	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	0.011	0.002	0.002	0.002	ug/L
BB81652	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.052	0.004	0.01	0.01	mg/L
BB81652	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.052	0.004	0.004	0.004	mg/L
BB81652	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.008	0.001	0.005	0.005	mg/L
BB81652	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.008	0.001	0.006	0.006	mg/L
BB81652	MAGU-DAS	CR-WM	Chromium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.313	0.001	0.1	0.1	mg/L
BB81652	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.179	0.002	0.015	0.015	mg/L
BB81652	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.179	0.002	0.013	0.013	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB81649

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB81649, BB81650, BB81651, BB81652

Sampling Date(s): 5/3/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: SVOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Thursday, May 17, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-xl1 05/10/12-1 (BB81649, BB81650, BB81651, BB81652)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/10/2012

QC Comments: QC Batch 00232 05/08/12 (BB81649, BB81650, BB81651, BB81652)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB82301, QA/QC Batch: 200232 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/09/12-1 (BB81649, BB81650, BB81651, BB81652)

Initial Calibration ECD14-050412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

Printed Name Jeff Bucko
Position: Chemist
Date: 5/9/2012

QC Comments: QC Batch 99956 05/04/12 (BB81649, BB81650, BB81651, BB81652)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB80634, QA/QC Batch: 199956 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/07/12-1 (BB81649, BB81650, BB81651, BB81652)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/7/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

QC (Site Specific)

---------- Sample No: BB81649, QA/QC Batch: 200065 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/10/12-1 (BB81649, BB81650, BB81651, BB81652)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/10/2012

Instrument: Icp10 05/14/12-1 (BB81652)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/14/2012

Instrument: Icp10 05/15/12-1 (BB81652)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/15/2012

Instrument: Icp9 05/15/12-1 (BB81650, BB81651, BB81652)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/15/2012

QC (Batch Specific)

---------- Sample No: BB81609, QA/QC Batch: 200001 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB81742, QA/QC Batch: 200026 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB81760, QA/QC Batch: 200031 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 05/07/12-1 (BB81649, BB81650, BB81651, BB81652)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/7/2012

QC (Batch Specific)

---------- Sample No: BB79693, QA/QC Batch: 199869 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 05/07/12-1 (BB81649, BB81650, BB81651, BB81652)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/7/2012

QC Comments: QC Batch 99755 05/02/12 (BB81649, BB81650, BB81651, BB81652)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

QC (Batch Specific)

---------- Sample No: BB79767, QA/QC Batch: 199755 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199838 (Samples: BB81649, BB81650, BB81651, BB81652): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline,3-Nitroaniline)

The LCS/LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,4-Dinitrophenol, Hexachlorocyclopentadiene, Pyridine)

Instrument: Chem12 05/08/12-1 (BB81649, BB81650, BB81651, BB81652)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Hexachlorocyclopentadiene, Atrazine, Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 5/8/2012

QC Comments: QC Batch 99838 05/03/12 (BB81649, BB81650, BB81651, BB81652)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

QC (Batch Specific)

---------- Sample No: BB80503, QA/QC Batch: 199838 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 3-Nitroaniline(133%), Hexachlorocyclopentadiene(23%), Pyridine(14%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 2-Nitroaniline(133%), 3-Nitroaniline(131%), Hexachlorocyclopentadiene(24%), Pyridine(14%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 05/07/12-1 (BB81649, BB81650, BB81651, BB81652)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0424):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-nitrosodimethylamine, % 2,4,6-Tribromophenol, Pentachloronitrobenzene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/7/2012

QC Comments: QC Batch 99838 05/03/12 (BB81649, BB81650, BB81651, BB81652)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 17, 2012

SDG I.D.: GBB81649

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem08 05/07/12-2 (BB81649, BB81650, BB81651, BB81652)

S -Side
Initial Calibration(RCPS_0507:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Acetone

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: None.

Printed Name Tina Covensky
Position: Chemist
Date: 5/7/2012

QC Comments: QC Batch 00295 05/09/12 (BB81649, BB81650, BB81651, BB81652)

A blank MS/MSD was analyzed with this batch.

QC (Batch Specific)

---------- Sample No: BB79363, QA/QC Batch: 200295 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6.0 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Gateway Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-3-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pesticides + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 Metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
81649	GP-7 GW	GW	5-3-2012	6:12am	✓	✓	✓	✓	✓	✓	✓						3	6			2
81650	GP-24 GW	↓	5-3-2012	8:19am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
81651	GP-26 GW	↓	5-3-2012	9:47am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
81652	GP-36 GW	↓	5-3-2012	11:09am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/4/12	9:20
[signature]	[signature]	5/4/12	12:36

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☒ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

PHOENIX
Environmental Laboratories, Inc.

Friday, May 11, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB79763 - BB79770

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/12	6:21
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79763

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-37 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.50	0.50	mg/Kg	05/06/12		LK	6010
Arsenic	5.00	0.80	mg/Kg	05/06/12		LK	6010
Barium	121	0.40	mg/Kg	05/06/12		LK	6010
Cadmium	0.45	0.40	mg/Kg	05/06/12		LK	6010
Chromium	19.6	0.40	mg/Kg	05/06/12		LK	6010
Mercury	0.35	0.08	mg/Kg	05/03/12		RS	SW-7471
Lead	520	4.0	mg/Kg	05/09/12		LK	6010
Selenium	< 1.6	1.6	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/09/12		LK	6010
SPLP Arsenic	0.020	0.004	mg/L	05/09/12		LK	6010
SPLP Barium	0.405	0.010	mg/L	05/09/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/09/12		LK	6010
SPLP Chromium	0.053	0.010	mg/L	05/09/12		LK	6010
SPLP Mercury	0.0010	0.0004	mg/L	05/03/12		RS	1312/SW7470
SPLP Lead	1.37	0.010	mg/L	05/09/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/09/12		LK	6010
Total Metals Digest	Completed			05/02/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/03/12		X/X	SW846-3005
Percent Solid	89		%	05/02/12		JL	E160.3
Soil Extraction for PCB	Completed			05/02/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/02/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/02/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/02/12		RS/F	3545
Mercury Digestion	Completed			05/03/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/02/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/03/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/02/12		X	EPA 1312
Field Extraction	Completed			05/01/12		mag	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 10-12 FT

Phoenix I.D.: BB79763

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/03/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/03/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/03/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/03/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/03/12		JRB	SW8151
Dicamba	ND	93	ug/Kg	05/03/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/03/12		JRB	SW8151
Dinoseb	ND	93	ug/Kg	05/03/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	54		%	05/03/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	910	22	mg/Kg	05/04/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/04/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	05/04/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/03/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/03/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	108		%	05/03/12		MH	30 - 150 %
% TCMX	96		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/04/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/04/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/04/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/04/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/04/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/04/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/04/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/04/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/04/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/04/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/04/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/04/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/04/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/04/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 10-12 FT

Phoenix I.D.: BB79763

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/04/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/04/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	119		%	05/04/12		KCA	30 - 150 %
% TCMX	87		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	160	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	270	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	270	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	270	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	1300	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	270	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	270	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	1300	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	5400	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	270	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	270	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	270	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	270	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	270	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	270	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	160	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 10-12 FT

Phoenix I.D.: BB79763

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	1600	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	540	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	270	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	8300	270	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	270	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	270	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	270	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	540	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	270	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	270	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	270	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	540	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	270	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	270	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	270	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	90		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	86		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	102		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
1,2-Dichlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
1,3-Dichlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
1,4-Dichlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,4-Dichlorophenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,4-Dimethylphenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrophenol	ND	2900	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrotoluene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2,6-Dinitrotoluene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2-Chloronaphthalene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2-Chlorophenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2-Methylnaphthalene	7900	1300	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 10-12 FT

Phoenix I.D.: BB79763

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	1300	ug/Kg	05/03/12		DD	SW 8270
2-Nitroaniline	ND	2900	ug/Kg	05/03/12		DD	SW 8270
2-Nitrophenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	1800	ug/Kg	05/03/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	1300	ug/Kg	05/03/12		DD	SW 8270
3-Nitroaniline	ND	2900	ug/Kg	05/03/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	5300	ug/Kg	05/03/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	1800	ug/Kg	05/03/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
4-Chloroaniline	ND	1300	ug/Kg	05/03/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	1300	ug/Kg	05/03/12		DD	SW 8270
4-Nitroaniline	ND	2900	ug/Kg	05/03/12		DD	SW 8270
4-Nitrophenol	ND	5300	ug/Kg	05/03/12		DD	SW 8270
Acenaphthene	5100	1300	ug/Kg	05/03/12		DD	SW 8270
Acenaphthylene	10000	1300	ug/Kg	05/03/12		DD	SW 8270
Acetophenone	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Aniline	ND	5300	ug/Kg	05/03/12		DD	SW 8270
Anthracene	19000	1300	ug/Kg	05/03/12		DD	SW 8270
Azobenzene	ND	1800	ug/Kg	05/03/12		DD	SW 8270
Benz(a)anthracene	41000	1300	ug/Kg	05/03/12		DD	SW 8270
Benzidine	ND	2200	ug/Kg	05/03/12		DD	SW 8270
Benzo(a)pyrene	35000	1300	ug/Kg	05/03/12		DD	SW 8270
Benzo(b)fluoranthene	44000	1300	ug/Kg	05/03/12		DD	SW 8270
Benzo(ghi)perylene	9000	1300	ug/Kg	05/03/12		DD	SW 8270
Benzo(k)fluoranthene	17000	1300	ug/Kg	05/03/12		DD	SW 8270
Benzoic acid	ND	5300	ug/Kg	05/03/12		DD	SW 8270
Benzyl butyl phthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	1800	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Carbazole	11000	2800	ug/Kg	05/03/12		DD	SW 8270
Chrysene	36000	1300	ug/Kg	05/03/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Dibenzofuran	11000	1300	ug/Kg	05/03/12		DD	SW 8270
Diethyl phthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Dimethylphthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Di-n-butylphthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Di-n-octylphthalate	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Fluoranthene	96000	1300	ug/Kg	05/03/12		DD	SW 8270
Fluorene	11000	1300	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobutadiene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Hexachloroethane	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	8800	1300	ug/Kg	05/03/12		DD	SW 8270
Isophorone	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Naphthalene	32000	1300	ug/Kg	05/03/12		DD	SW 8270
Nitrobenzene	ND	1300	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodimethylamine	ND	1800	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB79763

Client ID: GP-37 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	1300	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	1800	ug/Kg	05/03/12		DD	SW 8270
Pentachloronitrobenzene	ND	1800	ug/Kg	05/03/12		DD	SW 8270
Pentachlorophenol	ND	1800	ug/Kg	05/03/12		DD	SW 8270
Phenanthrene	94000	1300	ug/Kg	05/03/12		DD	SW 8270
Phenol	ND	1300	ug/Kg	05/03/12		DD	SW 8270
Pyrene	81000	1300	ug/Kg	05/03/12		DD	SW 8270
Pyridine	ND	1800	ug/Kg	05/03/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	103		%	05/03/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/03/12		DD	15 - 130 %
% 2-Fluorophenol	79		%	05/03/12		DD	15 - 130 %
% Nitrobenzene-d5	73		%	05/03/12		DD	15 - 130 %
% Phenol-d5	74		%	05/03/12		DD	15 - 130 %
% Terphenyl-d14	88		%	05/03/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C10 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/12	7:24
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79764

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-38 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	05/06/12		LK	6010
Arsenic	2.57	0.72	mg/Kg	05/06/12		LK	6010
Barium	18.9	0.36	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.36	0.36	mg/Kg	05/06/12		LK	6010
Chromium	7.83	0.36	mg/Kg	05/06/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	05/03/12		RS	SW-7471
Lead	5.25	0.36	mg/Kg	05/06/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/07/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/07/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/07/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/07/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/07/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/03/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/07/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/07/12		LK	6010
Total Metals Digest	Completed			05/02/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/03/12		X/X	SW846-3005
Percent Solid	97		%	05/02/12		JL	E160.3
Soil Extraction for PCB	Completed			05/02/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/02/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/02/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/02/12		RS/F	3545
Mercury Digestion	Completed			05/03/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/02/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/03/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/02/12		X	EPA 1312
Field Extraction	Completed			05/01/12		mag	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-38 10-12 FT

Phoenix I.D.: BB79764

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/03/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	05/03/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	05/03/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	63		%	05/03/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/03/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/03/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	90		%	05/03/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/03/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	104		%	05/03/12		MH	30 - 150 %
% TCMX	94		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDE	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDT	ND	32	ug/Kg	05/04/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/04/12		KCA	SW8081
Aldrin	ND	5.1	ug/Kg	05/04/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Chlordane	ND	51	ug/Kg	05/04/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Dieldrin	ND	5.1	ug/Kg	05/04/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/04/12		KCA	SW8081
Endosulfan II	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endosulfan sulfate	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin aldehyde	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin ketone	ND	32	ug/Kg	05/04/12		KCA	SW8081
g-BHC	ND	5.1	ug/Kg	05/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/04/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/04/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	85		%	05/04/12		KCA	30 - 150 %
% TCMX	91		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	23	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	23	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	94	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	2.8	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-38 10-12 FT

Phoenix I.D.: BB79764

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	28	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	9.4	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	9.4	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	9.4	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	4.7	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	90		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	97		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
1,2-Dichlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
1,3-Dichlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
1,4-Dichlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,4-Dichlorophenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,4-Dimethylphenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrophenol	ND	540	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrotoluene	ND	230	ug/Kg	05/03/12		DD	SW 8270
2,6-Dinitrotoluene	ND	230	ug/Kg	05/03/12		DD	SW 8270
2-Chloronaphthalene	ND	230	ug/Kg	05/03/12		DD	SW 8270
2-Chlorophenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
2-Methylnaphthalene	ND	230	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-38 10-12 FT

Phoenix I.D.: BB79764

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	230	ug/Kg	05/03/12		DD	SW 8270
2-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
2-Nitrophenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/03/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	230	ug/Kg	05/03/12		DD	SW 8270
3-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	970	ug/Kg	05/03/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
4-Chloroaniline	ND	230	ug/Kg	05/03/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	230	ug/Kg	05/03/12		DD	SW 8270
4-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4-Nitrophenol	ND	970	ug/Kg	05/03/12		DD	SW 8270
Acenaphthene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Acenaphthylene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Acetophenone	ND	230	ug/Kg	05/03/12		DD	SW 8270
Aniline	ND	970	ug/Kg	05/03/12		DD	SW 8270
Anthracene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Benz(a)anthracene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Benzidine	ND	400	ug/Kg	05/03/12		DD	SW 8270
Benzo(a)pyrene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Benzo(b)fluoranthene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Benzo(ghi)perylene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Benzo(k)fluoranthene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Benzoic acid	ND	970	ug/Kg	05/03/12		DD	SW 8270
Benzyl butyl phthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	230	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	230	ug/Kg	05/03/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Carbazole	ND	500	ug/Kg	05/03/12		DD	SW 8270
Chrysene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Dibenzofuran	ND	230	ug/Kg	05/03/12		DD	SW 8270
Diethyl phthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Dimethylphthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Di-n-butylphthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Di-n-octylphthalate	ND	230	ug/Kg	05/03/12		DD	SW 8270
Fluoranthene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Fluorene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobutadiene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Hexachloroethane	ND	230	ug/Kg	05/03/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Isophorone	ND	230	ug/Kg	05/03/12		DD	SW 8270
Naphthalene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Nitrobenzene	ND	230	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB79764

Client ID: GP-38 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	230	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/03/12		DD	SW 8270
Phenanthrene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Phenol	ND	230	ug/Kg	05/03/12		DD	SW 8270
Pyrene	ND	230	ug/Kg	05/03/12		DD	SW 8270
Pyridine	ND	140J	ug/Kg	05/03/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	85		%	05/03/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	05/03/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	05/03/12		DD	15 - 130 %
% Nitrobenzene-d5	71		%	05/03/12		DD	15 - 130 %
% Phenol-d5	68		%	05/03/12		DD	15 - 130 %
% Terphenyl-d14	90		%	05/03/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/12	7:57
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79765

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-39 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	05/06/12		LK	6010
Arsenic	1.91	0.66	mg/Kg	05/06/12		LK	6010
Barium	15.9	0.33	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.33	0.33	mg/Kg	05/06/12		LK	6010
Chromium	6.16	0.33	mg/Kg	05/06/12		LK	6010
Mercury	< 0.06	0.06	mg/Kg	05/03/12		RS	SW-7471
Lead	4.34	0.33	mg/Kg	05/06/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/03/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/02/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/04/12		X/X	SW846-3005
Percent Solid	97		%	05/02/12		JL	E160.3
Soil Extraction for PCB	Completed			05/02/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/02/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/02/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/02/12		RS/F	3545
Mercury Digestion	Completed			05/03/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/02/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/03/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/02/12		X	EPA 1312
Field Extraction	Completed			05/01/12		mag	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-39 10-12 FT

Phoenix I.D.: BB79765

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/03/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dicamba	ND	85	ug/Kg	05/03/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dinoseb	ND	85	ug/Kg	05/03/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	44		%	05/03/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/03/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/03/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	93		%	05/03/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/03/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	102		%	05/03/12		MH	30 - 150 %
% TCMX	92		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDE	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDT	ND	32	ug/Kg	05/04/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/04/12		KCA	SW8081
Aldrin	ND	5.1	ug/Kg	05/04/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Chlordane	ND	51	ug/Kg	05/04/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Dieldrin	ND	5.1	ug/Kg	05/04/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/04/12		KCA	SW8081
Endosulfan II	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endosulfan sulfate	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin aldehyde	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin ketone	ND	32	ug/Kg	05/04/12		KCA	SW8081
g-BHC	ND	5.1	ug/Kg	05/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/04/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/04/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	84		%	05/04/12		KCA	30 - 150 %
% TCMX	90		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	100	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	05/03/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	88		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrophenol	ND	540	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-39 10-12 FT

Phoenix I.D.: BB79765

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/03/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/03/12		DD	SW 8270
3-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	980	ug/Kg	05/03/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4-Nitrophenol	ND	980	ug/Kg	05/03/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/03/12		DD	SW 8270
Aniline	ND	980	ug/Kg	05/03/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/03/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzoic acid	ND	980	ug/Kg	05/03/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	05/03/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/03/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/03/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/03/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-39 10-12 FT

Phoenix I.D.: BB79765

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/03/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Pyridine	ND	140J	ug/Kg	05/03/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	84		%	05/03/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	05/03/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	05/03/12		DD	15 - 130 %
% Nitrobenzene-d5	69		%	05/03/12		DD	15 - 130 %
% Phenol-d5	66		%	05/03/12		DD	15 - 130 %
% Terphenyl-d14	92		%	05/03/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/12	10:15
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79766

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-40 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	05/06/12		LK	6010
Arsenic	1.77	0.70	mg/Kg	05/06/12		LK	6010
Barium	24.2	0.35	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.35	0.35	mg/Kg	05/06/12		LK	6010
Chromium	7.99	0.35	mg/Kg	05/06/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	05/03/12		RS	SW-7471
Lead	3.84	0.35	mg/Kg	05/06/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/03/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/02/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/04/12		X/X	SW846-3005
Percent Solid	96		%	05/02/12		JL	E160.3
Soil Extraction for PCB	Completed			05/02/12		RB	SW3545
Soil Extraction for Pesticide	Completed			05/02/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			05/02/12		RB/F	SW3545
Extraction of CT ETPH	Completed			05/02/12		RS/F	3545
Mercury Digestion	Completed			05/03/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/02/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/03/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/02/12		X	EPA 1312
Field Extraction	Completed			05/01/12		mag	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-40 10-12 FT

Phoenix I.D.: BB79766

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/03/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/03/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	05/03/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/03/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	05/03/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	54		%	05/03/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/03/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/03/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	96		%	05/03/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/03/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/03/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	100		%	05/03/12		MH	30 - 150 %
% TCMX	91		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDE	ND	32	ug/Kg	05/04/12		KCA	SW8081
4,4' -DDT	ND	32	ug/Kg	05/04/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/04/12		KCA	SW8081
Aldrin	ND	5.0	ug/Kg	05/04/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Chlordane	ND	50	ug/Kg	05/04/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/04/12		KCA	SW8081
Dieldrin	ND	5.0	ug/Kg	05/04/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/04/12		KCA	SW8081
Endosulfan II	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endosulfan sulfate	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin aldehyde	ND	32	ug/Kg	05/04/12		KCA	SW8081
Endrin ketone	ND	32	ug/Kg	05/04/12		KCA	SW8081
g-BHC	ND	5.0	ug/Kg	05/04/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/04/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/04/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/04/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	76		%	05/04/12		KCA	30 - 150 %
% TCMX	83		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	100	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	05/03/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	89		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	99		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	103		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrophenol	ND	540	ug/Kg	05/03/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-40 10-12 FT

Phoenix I.D.: BB79766

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/03/12		DD	SW 8270
2-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/03/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/03/12		DD	SW 8270
3-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	980	ug/Kg	05/03/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/03/12		DD	SW 8270
4-Nitroaniline	ND	540	ug/Kg	05/03/12		DD	SW 8270
4-Nitrophenol	ND	980	ug/Kg	05/03/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/03/12		DD	SW 8270
Aniline	ND	980	ug/Kg	05/03/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/03/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Benzoic acid	ND	980	ug/Kg	05/03/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/03/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/03/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	05/03/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/03/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/03/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/03/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/03/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB79766

Client ID: GP-40 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/03/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/03/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/03/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/03/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/03/12		DD	SW 8270
Pyridine	ND	140J	ug/Kg	05/03/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	86		%	05/03/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	05/03/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	05/03/12		DD	15 - 130 %
% Nitrobenzene-d5	73		%	05/03/12		DD	15 - 130 %
% Phenol-d5	69		%	05/03/12		DD	15 - 130 %
% Terphenyl-d14	95		%	05/03/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/01/12	6:55
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79767

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-37 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		LK	6010
Barium	0.040	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010
Chromium	0.003	0.001	mg/L	05/09/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/09/12		LK	6010/200.7
Barium (Dissolved)	0.052	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium (Dissolved)	0.008	0.001	mg/L	05/09/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead (Dissolved)	0.002	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/09/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead	0.003	0.002	mg/L	05/09/12		LK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/02/12		AG	SW846-3005
Total Metals Digestion	Completed			05/02/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/03/12		X/X	SW7470
Mercury Digestion	Completed			05/03/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed			05/02/12		LT	SW3510C
Extraction for Pest (2 Liter)	Completed			05/02/12		LT/L	SW3510
Semi-Volatile Extraction	Completed			05/02/12		F/D/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	12	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	76		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	128		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/03/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	54		%	05/03/12		MH	30 - 150 %
% TCMX	75		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/04/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/04/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/04/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/04/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/04/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/04/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/04/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/04/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/04/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 GW

Phoenix I.D.: BB79767

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/04/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	63		%	05/04/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	65		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/07/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/07/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/07/12		R/T	SW8260
Acetone	ND	25	ug/L	05/07/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/07/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/07/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/07/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/07/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/07/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/07/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/07/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
Naphthalene	3.7	1.0	ug/L	05/07/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/07/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/07/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/07/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/07/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/07/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/07/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/07/12		R/T	70 - 130 %
% Bromofluorobenzene	94		%	05/07/12		R/T	70 - 130 %
% Dibromofluoromethane	105		%	05/07/12		R/T	70 - 130 %
% Toluene-d8	76		%	05/07/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-37 GW

Phoenix I.D.: BB79767

Parameter	Result	RL	Units	Date	Time	By	Reference	
3,3'-Dichlorobenzidine	ND	50	ug/L	05/06/12		DD	SW8270	
3-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270	
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/06/12		DD	SW8270	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270	
4-Chloro-3-methylphenol	ND	20	ug/L	05/06/12		DD	SW8270	
4-Chloroaniline	ND	20	ug/L	05/06/12		DD	SW8270	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270	
4-Nitroaniline	ND	20	ug/L	05/06/12		DD	SW8270	
4-Nitrophenol	ND	50	ug/L	05/06/12		DD	SW8270	
Acetophenone	ND	5.0	ug/L	05/06/12		DD	SW8270	
Aniline	ND	10	ug/L	05/06/12		DD	SW8270	
Anthracene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Azobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Benzidine	ND	50	ug/L	05/06/12		DD	SW8270	
Benzoic acid	ND	50	ug/L	05/06/12		DD	SW8270	
Benzyl butyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270	
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/06/12		DD	SW8270	
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270	
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270	
Carbazole	ND	5.0	ug/L	05/06/12		DD	SW8270	
Dibenzofuran	ND	5.0	ug/L	05/06/12		DD	SW8270	
Diethyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270	
Dimethylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270	
Di-n-butylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270	
Di-n-octylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270	
Fluoranthene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Fluorene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Hexachlorobutadiene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Isophorone	ND	5.0	ug/L	05/06/12		DD	SW8270	
Naphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Nitrobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270	
N-Nitrosodimethylamine	ND	5.0	ug/L	05/06/12		DD	SW8270	
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/06/12		DD	SW8270	
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/06/12		DD	SW8270	
Phenol	ND	10	ug/L	05/06/12		DD	SW8270	
Pyrene	ND	5.0	ug/L	05/06/12		DD	SW8270	
Pyridine	ND	5.0	ug/L	05/06/12		DD	SW8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	126		%	05/06/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	75		%	05/06/12		DD	15 - 130 %	
% 2-Fluorophenol	65		%	05/06/12		DD	15 - 130 %	
% Nitrobenzene-d5	80		%	05/06/12		DD	15 - 130 %	
% Phenol-d5	63		%	05/06/12		DD	15 - 130 %	
% Terphenyl-d14	>160		%	05/06/12		DD	15 - 130 %	3
Semivolatiles								
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)	
Acenaphthene	0.1	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Acenaphthylene	0.19	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benz(a)anthracene	0.08	0.040	ug/L	05/04/12		DD	SW8270 (SIM)	

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-37 GW

Phoenix I.D.: BB79767

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benzo(a)pyrene	0.05	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	0.08	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)	
Chrysene	0.06	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	0.01	0.010	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	05/04/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	05/04/12		DD	SW8270 (SIM)	
Phenanthrene	0.54	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	126		%	05/04/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	75		%	05/04/12		DD	15 - 130 %	
% 2-Fluorophenol	65		%	05/04/12		DD	15 - 130 %	
% Nitrobenzene-d5	80		%	05/04/12		DD	15 - 130 %	
% Phenol-d5	63		%	05/04/12		DD	15 - 130 %	
% Terphenyl-d14	>160		%	05/04/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/01/12	9:44
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79768

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-39 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	0.005	0.004	mg/L	05/09/12		LK	6010
Barium	0.124	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010
Chromium	0.034	0.001	mg/L	05/09/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/09/12		LK	6010/200.7
Barium (Dissolved)	0.031	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/09/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead	0.020	0.002	mg/L	05/09/12		LK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/02/12		AG	SW846-3005
Total Metals Digestion	Completed			05/02/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/03/12		X/X	SW7470
Mercury Digestion	Completed			05/03/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed			05/02/12		LT	SW3510C
Extraction for Pest (2 Liter)	Completed			05/02/12		LT/L	SW3510
Semi-Volatile Extraction	Completed			05/03/12		f/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.5	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.5	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.5	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	15	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.5	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	3.0	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.5	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	3.0	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	129		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/03/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	71		%	05/03/12		MH	30 - 150 %
% TCMX	68		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/04/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/04/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/04/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/04/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/04/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/04/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/04/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/04/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/04/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-39 GW

Phoenix I.D.: BB79768

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/04/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	66		%	05/04/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	56		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/07/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/07/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/07/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/07/12		R/T	SW8260
Acetone	ND	25	ug/L	05/07/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	05/07/12		R/T	SW8260
Benzene	ND	0.70	ug/L	05/07/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/07/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	05/07/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/07/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/07/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/07/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/07/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/07/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
Naphthalene	1.4	1.0	ug/L	05/07/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	05/07/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Styrene	ND	1.0	ug/L	05/07/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/07/12		R/T	SW8260
Toluene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/07/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/07/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/07/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/07/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/07/12		R/T	70 - 130 %
% Bromofluorobenzene	94		%	05/07/12		R/T	70 - 130 %
% Dibromofluoromethane	107		%	05/07/12		R/T	70 - 130 %
% Toluene-d8	76		%	05/07/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-39 GW

Phoenix I.D.: BB79768

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/06/12		DD	SW8270
Aniline	ND	10	ug/L	05/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
Benzidine	ND	50	ug/L	05/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
Phenol	ND	10	ug/L	05/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	05/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	119		%	05/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	05/06/12		DD	15 - 130 %
% 2-Fluorophenol	48		%	05/06/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	05/06/12		DD	15 - 130 %
% Phenol-d5	43		%	05/06/12		DD	15 - 130 %
% Terphenyl-d14	158		%	05/06/12		DD	15 - 130 % 3

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	05/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-39 GW

Phoenix I.D.: BB79768

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benzo(a)pyrene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)	
Chrysene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	05/04/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	05/04/12		DD	SW8270 (SIM)	
Phenanthrene	0.09	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	119		%	05/04/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	72		%	05/04/12		DD	15 - 130 %	
% 2-Fluorophenol	48		%	05/04/12		DD	15 - 130 %	
% Nitrobenzene-d5	77		%	05/04/12		DD	15 - 130 %	
% Phenol-d5	43		%	05/04/12		DD	15 - 130 %	
% Terphenyl-d14	158		%	05/04/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 11, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/01/12	10:59
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79769

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-44 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic	< 0.004	0.004	mg/L	05/09/12		LK	6010
Barium	0.059	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium	< 0.001	0.001	mg/L	05/09/12		LK	6010
Chromium	0.010	0.001	mg/L	05/09/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Arsenic (Dissolved)	< 0.004	0.004	mg/L	05/09/12		LK	6010/200.7
Barium (Dissolved)	0.031	0.002	mg/L	05/09/12		LK	6010/200.7
Cadmium (Dissolved)	< 0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Chromium (Dissolved)	0.001	0.001	mg/L	05/09/12		LK	6010/200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	05/09/12		LK	6010/200.7
Selenium (Dissolved)	< 0.011	0.011	mg/L	05/09/12		LK	6010/200.7
Mercury	< 0.0002	0.0002	mg/L	05/03/12		RS	7470/E245.1
Lead	0.003	0.002	mg/L	05/09/12		LK	6010
Selenium	< 0.010	0.010	mg/L	05/09/12		LK	6010/200.7
Dissolved Metals Preparation	Completed			05/02/12		AG	SW846-3005
Total Metals Digestion	Completed			05/02/12		AG	
Extraction of CT ETPH	Completed			05/04/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			05/03/12		X/X	SW7470
Mercury Digestion	Completed			05/03/12		X/X	7471/245.1
Extraction for Herbicide	Completed			05/04/12		D/D	SW8151
PCB Extraction	Completed			05/02/12		LT	SW3510C
Extraction for Pest (2 Liter)	Completed			05/02/12		LT/L	SW3510
Semi-Volatile Extraction	Completed			05/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	05/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	05/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	05/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	05/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	05/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	05/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	05/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	05/07/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	05/07/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	112		%	05/07/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	05/03/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	05/03/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	62		%	05/03/12		MH	30 - 150 %
% TCMX	64		%	05/03/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDE	ND	0.1	ug/L	05/04/12		KCA	SW8081
4,4' -DDT	ND	0.1	ug/L	05/04/12		KCA	SW8081
a-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Alachlor	ND	0.1	ug/L	05/04/12		KCA	SW8081
Aldrin	ND	0.003	ug/L	05/04/12		KCA	SW8081
b-BHC	ND	0.01	ug/L	05/04/12		KCA	SW8081
Chlordane	ND	0.3	ug/L	05/04/12		KCA	SW8081
d-BHC	ND	0.05	ug/L	05/04/12		KCA	SW8081
Dieldrin	ND	0.002	ug/L	05/04/12		KCA	SW8081
Endosulfan I	ND	0.05	ug/L	05/04/12		KCA	SW8081
Endosulfan II	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin Aldehyde	ND	0.1	ug/L	05/04/12		KCA	SW8081
Endrin ketone	ND	0.1	ug/L	05/04/12		KCA	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor	ND	0.05	ug/L	05/04/12		KCA	SW8081
Heptachlor epoxide	ND	0.05	ug/L	05/04/12		KCA	SW8081
Methoxychlor	ND	0.2	ug/L	05/04/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-44 GW

Phoenix I.D.: BB79769

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	05/04/12		KCA	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	55		%	05/04/12		KCA	30 - 150 %
%TCMX (Surrogate Rec)	54		%	05/04/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,1,1-Trichloroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
1,1,2-Trichloroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloroethene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,1-Dichloropropene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2,3-Trichloropropane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,2-Dichloroethane	ND	1.2	ug/L	05/07/12		R/T	SW8260
1,2-Dichloropropane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,3-Dichloropropane	ND	2.0	ug/L	05/07/12		R/T	SW8260
1,4-Dichlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
2,2-Dichloropropane	ND	2.0	ug/L	05/07/12		R/T	SW8260
2-Chlorotoluene	ND	2.0	ug/L	05/07/12		R/T	SW8260
2-Hexanone	ND	10	ug/L	05/07/12		R/T	SW8260
2-Isopropyltoluene	ND	2.0	ug/L	05/07/12		R/T	SW8260
4-Chlorotoluene	ND	2.0	ug/L	05/07/12		R/T	SW8260
4-Methyl-2-pentanone	ND	10	ug/L	05/07/12		R/T	SW8260
Acetone	ND	50	ug/L	05/07/12		R/T	SW8260
Acrylonitrile	ND	10	ug/L	05/07/12		R/T	SW8260
Benzene	ND	1.4	ug/L	05/07/12		R/T	SW8260
Bromobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Bromochloromethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Bromodichloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Bromoform	ND	2.0	ug/L	05/07/12		R/T	SW8260
Bromomethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Carbon Disulfide	ND	10	ug/L	05/07/12		R/T	SW8260
Carbon tetrachloride	ND	2.0	ug/L	05/07/12		R/T	SW8260
Chlorobenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Chloroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Chloroform	ND	2.0	ug/L	05/07/12		R/T	SW8260
Chloromethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	2.0	ug/L	05/07/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dibromochloromethane	ND	1.0	ug/L	05/07/12		R/T	SW8260
Dibromoethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Dibromomethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Dichlorodifluoromethane	ND	2.0	ug/L	05/07/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Hexachlorobutadiene	ND	0.80	ug/L	05/07/12		R/T	SW8260
Isopropylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
m&p-Xylene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Methyl ethyl ketone	ND	10	ug/L	05/07/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	05/07/12		R/T	SW8260
Methylene chloride	ND	2.0	ug/L	05/07/12		R/T	SW8260
Naphthalene	ND	2.0	ug/L	05/07/12		R/T	SW8260
n-Butylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
n-Propylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
o-Xylene	ND	2.0	ug/L	05/07/12		R/T	SW8260
p-Isopropyltoluene	ND	2.0	ug/L	05/07/12		R/T	SW8260
sec-Butylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Styrene	ND	2.0	ug/L	05/07/12		R/T	SW8260
tert-Butylbenzene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Tetrachloroethene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	10	ug/L	05/07/12		R/T	SW8260
Toluene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Total Xylenes	ND	2.0	ug/L	05/07/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	2.0	ug/L	05/07/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	1.0	ug/L	05/07/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/L	05/07/12		R/T	SW8260
Trichloroethene	ND	2.0	ug/L	05/07/12		R/T	SW8260
Trichlorofluoromethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Trichlorotrifluoroethane	ND	2.0	ug/L	05/07/12		R/T	SW8260
Vinyl chloride	ND	2.0	ug/L	05/07/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/07/12		R/T	70 - 130 %
% Bromofluorobenzene	96		%	05/07/12		R/T	70 - 130 %
% Dibromofluoromethane	107		%	05/07/12		R/T	70 - 130 %
% Toluene-d8	73		%	05/07/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	05/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	05/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	05/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	05/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	05/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	05/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-44 GW

Phoenix I.D.: BB79769

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	05/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	05/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	05/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	05/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	05/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	05/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	05/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	05/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	05/06/12		DD	SW8270
Aniline	ND	10	ug/L	05/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	05/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
Benzidine	ND	50	ug/L	05/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	05/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	05/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	05/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	05/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	05/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	05/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	05/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	05/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	05/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	05/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	05/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	05/06/12		DD	SW8270
Phenol	ND	10	ug/L	05/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	05/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	05/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	119		%	05/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	05/06/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	05/06/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/06/12		DD	15 - 130 %
% Phenol-d5	67		%	05/06/12		DD	15 - 130 %
% Terphenyl-d14	146		%	05/06/12		DD	15 - 130 % 3
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.05	0.040	ug/L	05/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-44 GW

Phoenix I.D.: BB79769

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benzo(a)pyrene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	05/04/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	05/04/12		DD	SW8270 (SIM)	
Chrysene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	ND	0.010	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	05/04/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	05/04/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	05/04/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	05/04/12		DD	SW8270 (SIM)	
Phenanthrene	0.18	0.050	ug/L	05/04/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	119		%	05/04/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	72		%	05/04/12		DD	15 - 130 %	
% 2-Fluorophenol	69		%	05/04/12		DD	15 - 130 %	
% Nitrobenzene-d5	79		%	05/04/12		DD	15 - 130 %	
% Phenol-d5	67		%	05/04/12		DD	15 - 130 %	
% Terphenyl-d14	146		%	05/04/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* The surrogate failed method criteria due to sample matrix interference for the semivolatile analysis. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

Elevated reporting limits for volatiles due to the foamy nature of the sample.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		05/01/12	0:00
Location Code:	MAGU-NH	Received by:	LB	05/02/12	12:30
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	DOTM1-0000082800				

Laboratory Data

SDG ID: GBB79763
Phoenix ID: BB79770

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-9

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/04/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/04/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/04/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/04/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/04/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/04/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/04/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/04/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/04/12		H/T	SW8260
Acetone	ND	25	ug/L	05/04/12		H/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-9

Phoenix I.D.: BB79770

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	05/04/12		H/T	SW8260
Benzene	ND	0.70	ug/L	05/04/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/04/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	05/04/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/04/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/04/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	05/04/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/04/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/04/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/04/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/04/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/04/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/04/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/04/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	05/04/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	05/04/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/04/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Styrene	ND	1.0	ug/L	05/04/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/04/12		H/T	SW8260
Toluene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/04/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/04/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/04/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/04/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/04/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/04/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/04/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/04/12		H/T	70 - 130 %
% Bromofluorobenzene	95		%	05/04/12		H/T	70 - 130 %
% Dibromofluoromethane	103		%	05/04/12		H/T	70 - 130 %
% Toluene-d8	96		%	05/04/12		H/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB79770

Client ID: TB-9

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 11, 2012

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199772, QC Sample No: BB74627 (BB79763, BB79764, BB79765, BB79766)												
Mercury - Soil	BDL	0.08	0.09	NC	105	96.5	8.4	101	92.2	9.1	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 199646, QC Sample No: BB79294 (BB79767, BB79768, BB79769)												
ICP Metals - Dissolved												
Arsenic	BDL	<0.004	<0.004	NC	95.2	95.4	0.2	91.4	93.9	2.7	75 - 125	20
Barium	BDL	0.035	0.036	2.80	97.4	97.4	0.0	93.3	95.5	2.3	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	96.2	96.8	0.6	91.6	93.4	1.9	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	96.9	97.3	0.4	92.5	94.7	2.4	75 - 125	20
Lead	BDL	0.004	<0.002	NC	97.7	97.7	0.0	92.7	95.0	2.5	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	89.8	90.3	0.6	87.1	89.2	2.4	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	96.3	96.5	0.2	75.0	77.1	2.8	75 - 125	20
QA/QC Batch 199726, QC Sample No: BB79515 (BB79763, BB79764, BB79765, BB79766)												
ICP Metals - Soil												
Arsenic	BDL	1.15	0.81	NC	93.7	92.7	1.1	94.4	95.5	1.2	75 - 125	30
Barium	BDL	2.40	2.79	15.0	100	102	2.0	104	104	0.0	75 - 125	30
Cadmium	BDL	<0.31	<0.35	NC	85.7	85.7	0.0	97.5	98.5	1.0	75 - 125	30
Chromium	BDL	3.60	2.32	43.2	97.2	97.6	0.4	99.7	100	0.3	75 - 125	30 r
Lead	BDL	1.43	1.43	NC	98.3	98.5	0.2	98.6	99.6	1.0	75 - 125	30
Selenium	BDL	<1.2	<1.4	NC	78.1	77.4	0.9	80.4	82.5	2.6	75 - 125	30
Silver	BDL	<0.31	<0.35	NC	102	99.7	2.3	98.4	98.7	0.3	75 - 125	30
QA/QC Batch 199743, QC Sample No: BB79740 (BB79767, BB79768, BB79769)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	97.1	96.6	0.5	99.0	99.9	0.9	75 - 125	20
Barium	BDL	0.005	0.005	NC	99.9	98.9	1.0	98.3	98.9	0.6	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	98.3	97.4	0.9	101	101	0.0	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	99.3	98.2	1.1	97.2	97.0	0.2	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	99.6	99.0	0.6	99.0	98.4	0.6	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	92.2	92.3	0.1	96.1	95.4	0.7	75 - 125	20
Silver	BDL	<0.002	<0.001	NC	96.1	95.7	0.4	95.7	95.8	0.1	75 - 125	20
QA/QC Batch 199775, QC Sample No: BB79764 (BB79763, BB79764)												
ICP Metals - SPLP Extraction												
Arsenic	BDL	<0.004	<0.004	NC	102	104	1.9	101	104	2.9	75 - 125	20
Barium	BDL	<0.010	<0.010	NC	99.0	101	2.0	98.5	99.5	1.0	75 - 125	20
Cadmium	BDL	<0.005	<0.005	NC	107	110	2.8	107	109	1.9	75 - 125	20
Chromium	BDL	<0.010	<0.010	NC	102	105	2.9	102	103	1.0	75 - 125	20
Lead	BDL	<0.010	<0.010	NC	102	106	3.8	102	104	1.9	75 - 125	20
Selenium	BDL	<0.020	<0.020	NC	104	108	3.8	104	105	1.0	75 - 125	20
Silver	BDL	<0.010	<0.010	NC	96.2	99.0	2.9	95.9	95.5	0.4	75 - 125	20

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199773, QC Sample No: BB79767 (BB79767, BB79768, BB79769)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	98.2	103	4.8	97.8	98.2	0.4	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 199774, QC Sample No: BB80166 (BB79763, BB79764, BB79765, BB79766)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	95.4	94.8	0.6	89.2	90.4	1.3	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 199961, QC Sample No: BB80629 (BB79765, BB79766)												
ICP Metals - SPLP Extraction												
Arsenic	BDL	0.005	<0.004	NC	99.2	99.4	0.2	98.5	99.3	0.8	75 - 125	20
Barium	BDL	0.066	0.074	11.4	98.2	98.1	0.1	97.6	97.6	0.0	75 - 125	20
Cadmium	BDL	<0.005	<0.005	NC	100	101	1.0	99.1	101	1.9	75 - 125	20
Chromium	BDL	0.018	0.017	NC	99.4	99.6	0.2	99.4	101	1.6	75 - 125	20
Lead	BDL	0.016	0.018	NC	99.4	100	0.6	100	101	1.0	75 - 125	20
Selenium	BDL	<0.020	<0.020	NC	100	100	0.0	98.4	100	1.6	75 - 125	20
Silver	BDL	<0.010	<0.010	NC	92.4	92.7	0.3	93.6	94.3	0.7	75 - 125	20

r = This parameter is outside laboratory rpd specified recovery limits.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 11, 2012

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199256, QC Sample No: BB77175 (BB79767, BB79768, BB79769)										
Chlorinated Herbicides - Ground Water										
2,4,5-T	ND	91	92	1.1				40 - 140	20	
2,4,5-TP (Silvex)	ND	89	91	2.2				40 - 140	20	
2,4-D	ND	104	102	1.9				40 - 140	20	
2,4-DB	ND	88	90	2.2				40 - 140	20	
Dalapon	ND	89	90	1.1				40 - 140	20	
Dicamba	ND	85	86	1.2				40 - 140	20	
Dichloroprop	ND	82	85	3.6				40 - 140	20	
Dinoseb	ND	63	61	3.2				40 - 140	20	
% DCAA (Surrogate Rec)	68	72	74	2.7				30 - 150	20	
QA/QC Batch 199649, QC Sample No: BB78909 (BB79767, BB79768, BB79769)										
Polychlorinated Biphenyls - Ground Water										
PCB-1016	ND	91	90	1.1				40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	97	97	0.0				40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	
% DCBP (Surrogate Rec)	102	104	102	1.9				30 - 150	20	
% TCMX (Surrogate Rec)	88	90	88	2.2				30 - 150	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 199629, QC Sample No: BB79026 (BB79763, BB79764, BB79765, BB79766)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	43	47	8.9	43	34	23.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	44	48	8.7	47	37	23.8	40 - 140	30	
2,4-D	ND	47	54	13.9	48	38	23.3	40 - 140	30	
2,4-DB	ND	43	51	17.0	36	28	25.0	40 - 140	30	m
Dalapon	ND	57	58	1.7	*	*	NC	40 - 140	30	
Dicamba	ND	48	51	6.1	48	41	15.7	40 - 140	30	
Dichloroprop	ND	37	42	12.7	41	35	15.8	40 - 140	30	l
Dinoseb	ND	20	32	46.2	26	4.3	143.2	40 - 140	30	l,m,r
% DCAA (Surrogate Rec)	64	74	79	6.5	74	60	20.9	30 - 150	30	

Comment:

* The MS/MSD recovery could not be determined for this compound due to the interference from a non-target peak.

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 199619, QC Sample No: BB79026 (BB79763, BB79764, BB79765)									
Pesticides - Soil									
4,4' -DDD	ND	73	80	9.2	76	79	3.9	40 - 140	30
4,4' -DDE	ND	76	83	8.8	80	83	3.7	40 - 140	30
4,4' -DDT	ND	70	80	13.3	72	76	5.4	40 - 140	30
a-BHC	ND	81	89	9.4	85	89	4.6	40 - 140	30
a-Chlordane	ND	79	88	10.8	84	88	4.7	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	79	85	7.3	83	86	3.6	40 - 140	30
b-BHC	ND	75	82	8.9	80	81	1.2	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	79	87	9.6	83	87	4.7	40 - 140	30
Dieldrin	ND	81	89	9.4	85	89	4.6	40 - 140	30
Endosulfan I	ND	78	85	8.6	83	87	4.7	40 - 140	30
Endosulfan II	ND	70	78	10.8	80	84	4.9	40 - 140	30
Endosulfan sulfate	ND	69	81	16.0	79	82	3.7	40 - 140	30
Endrin	ND	75	83	10.1	80	83	3.7	40 - 140	30
Endrin aldehyde	ND	61	62	1.6	79	83	4.9	40 - 140	30
Endrin ketone	ND	76	85	11.2	81	84	3.6	40 - 140	30
g-BHC	ND	80	88	9.5	84	88	4.7	40 - 140	30
g-Chlordane	ND	80	87	8.4	84	88	4.7	40 - 140	30
Heptachlor	ND	79	84	6.1	81	85	4.8	40 - 140	30
Heptachlor epoxide	ND	80	85	6.1	83	86	3.6	40 - 140	30
Methoxychlor	ND	65	74	12.9	68	72	5.7	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	92	73	78	6.6	76	77	1.3	30 - 150	30
% TCMX	87	88	93	5.5	92	93	1.1	30 - 150	30
QA/QC Batch 199642, QC Sample No: BB79564 (BB79763, BB79764, BB79765, BB79766)									
TPH by GC (Extractable Products) - Soil									
Ext. Petroleum HC	ND	63	63	0.0				50 - 150	30
% n-Pentacosane	88	83	86	3.6				50 - 150	30

Comment:

*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.

QA/QC Batch 199744, QC Sample No: BB79766 (BB79766)									
Pesticides - Soil									
4,4' -DDD	ND	80	84	4.9	80	83	3.7	40 - 140	30
4,4' -DDE	ND	80	83	3.7	81	81	0.0	40 - 140	30
4,4' -DDT	ND	77	85	9.9	79	79	0.0	40 - 140	30
a-BHC	ND	83	87	4.7	84	85	1.2	40 - 140	30
a-Chlordane	ND	81	85	4.8	82	82	0.0	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	80	84	4.9	81	82	1.2	40 - 140	30
b-BHC	ND	82	85	3.6	81	81	0.0	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	82	86	4.8	84	85	1.2	40 - 140	30
Dieldrin	ND	81	86	6.0	82	83	1.2	40 - 140	30
Endosulfan I	ND	79	83	4.9	82	81	1.2	40 - 140	30
Endosulfan II	ND	69	76	9.7	79	78	1.3	40 - 140	30
Endosulfan sulfate	ND	69	77	11.0	76	78	2.6	40 - 140	30
Endrin	ND	74	79	6.5	79	81	2.5	40 - 140	30
Endrin aldehyde	ND	65	75	14.3	82	86	4.8	40 - 140	30

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Endrin ketone	ND	82	91	10.4	85	87	2.3	40 - 140	30	
g-BHC	ND	83	87	4.7	84	84	0.0	40 - 140	30	
g-Chlordane	ND	81	85	4.8	82	83	1.2	40 - 140	30	
Heptachlor	ND	81	85	4.8	82	84	2.4	40 - 140	30	
Heptachlor epoxide	ND	81	84	3.6	82	82	0.0	40 - 140	30	
Methoxychlor	ND	75	82	8.9	87	96	9.8	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	93	86	96	11.0	86	93	7.8	30 - 150	30	
% TCMX	93	90	93	3.3	89	90	1.1	30 - 150	30	
QA/QC Batch 199724, QC Sample No: BB79766 (BB79763, BB79764, BB79765, BB79766)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	106	98	7.8	90	94	4.3	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	117	107	8.9	96	94	2.1	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	58	105	96	9.0	74	73	1.4	30 - 150	30	
% TCMX (Surrogate Rec)	50	92	83	10.3	80	79	1.3	30 - 150	30	
QA/QC Batch 199719, QC Sample No: BB79766 (BB79763, BB79764, BB79765, BB79766)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	43	43	0.0	44	42	4.7	30 - 130	30	
1,2,4-Trichlorobenzene	ND	66	67	1.5	68	67	1.5	30 - 130	30	
1,2-Dichlorobenzene	ND	65	66	1.5	66	64	3.1	30 - 130	30	
1,3-Dichlorobenzene	ND	63	64	1.6	65	64	1.6	30 - 130	30	
1,4-Dichlorobenzene	ND	65	65	0.0	66	65	1.5	30 - 130	30	
2,4,5-Trichlorophenol	ND	83	84	1.2	85	82	3.6	30 - 130	30	
2,4,6-Trichlorophenol	ND	78	79	1.3	81	77	5.1	30 - 130	30	
2,4-Dichlorophenol	ND	75	77	2.6	77	73	5.3	30 - 130	30	
2,4-Dimethylphenol	ND	53	53	0.0	55	52	5.6	30 - 130	30	
2,4-Dinitrophenol	ND	<5	8.2	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	78	79	1.3	77	73	5.3	30 - 130	30	
2,6-Dinitrotoluene	ND	79	80	1.3	80	76	5.1	30 - 130	30	
2-Chloronaphthalene	ND	76	77	1.3	76	76	0.0	30 - 130	30	
2-Chlorophenol	ND	70	71	1.4	71	68	4.3	30 - 130	30	
2-Methylnaphthalene	ND	71	73	2.8	74	71	4.1	30 - 130	30	
2-Methylphenol (o-cresol)	ND	68	69	1.5	70	66	5.9	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	73	73	0.0	74	66	11.4	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	72	73	1.4	74	68	8.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	61	61	0.0	63	65	3.1	30 - 130	30	
3-Nitroaniline	ND	83	85	2.4	83	78	6.2	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	71	75	5.5	60	50	18.2	30 - 130	30	
4-Bromophenyl phenyl ether	ND	80	80	0.0	80	78	2.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	80	82	2.5	81	78	3.8	30 - 130	30	
4-Chloroaniline	ND	149	146	2.0	133	119	11.1	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	79	79	0.0	78	77	1.3	30 - 130	30	
4-Nitroaniline	ND	83	85	2.4	83	78	6.2	30 - 130	30	
4-Nitrophenol	ND	92	69	28.6	66	61	7.9	30 - 130	30	

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acenaphthene	ND	75	77	2.6	76	74	2.7	30 - 130	30	
Acenaphthylene	ND	73	74	1.4	73	71	2.8	30 - 130	30	
Acetophenone	ND	34	35	2.9	35	33	5.9	30 - 130	30	
Aniline	ND	50	50	0.0	48	32	40.0	30 - 130	30	r
Anthracene	ND	79	79	0.0	79	79	0.0	30 - 130	30	
Azobenzene	ND	36	36	0.0	36	36	0.0	30 - 130	30	
Benz(a)anthracene	ND	77	77	0.0	76	76	0.0	30 - 130	30	
Benzidine	ND	117	113	3.5	94	91	3.2	30 - 130	30	
Benzo(a)pyrene	ND	78	77	1.3	76	75	1.3	30 - 130	30	
Benzo(b)fluoranthene	ND	78	80	2.5	80	79	1.3	30 - 130	30	
Benzo(ghi)perylene	ND	84	80	4.9	80	90	11.8	30 - 130	30	
Benzo(k)fluoranthene	ND	85	80	6.1	83	79	4.9	30 - 130	30	
Benzyl butyl phthalate	ND	78	79	1.3	80	76	5.1	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	71	73	2.8	73	71	2.8	30 - 130	30	
Bis(2-chloroethyl)ether	ND	63	63	0.0	64	71	10.4	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	66	66	0.0	67	64	4.6	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	78	79	1.3	79	78	1.3	30 - 130	30	
Carbazole	ND	119	119	0.0	118	113	4.3	30 - 130	30	
Chrysene	ND	75	77	2.6	77	74	4.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	84	82	2.4	81	88	8.3	30 - 130	30	
Dibenzofuran	ND	75	76	1.3	75	74	1.3	30 - 130	30	
Diethyl phthalate	ND	78	78	0.0	78	79	1.3	30 - 130	30	
Dimethylphthalate	ND	78	78	0.0	78	77	1.3	30 - 130	30	
Di-n-butylphthalate	ND	76	76	0.0	76	79	3.9	30 - 130	30	
Di-n-octylphthalate	ND	81	80	1.2	81	82	1.2	30 - 130	30	
Fluoranthene	ND	79	78	1.3	78	80	2.5	30 - 130	30	
Fluorene	ND	78	78	0.0	78	76	2.6	30 - 130	30	
Hexachlorobenzene	ND	75	76	1.3	76	76	0.0	30 - 130	30	
Hexachlorobutadiene	ND	69	69	0.0	70	69	1.4	30 - 130	30	
Hexachlorocyclopentadiene	ND	74	78	5.3	80	52	42.4	30 - 130	30	r
Hexachloroethane	ND	63	64	1.6	65	63	3.1	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	84	81	3.6	80	89	10.7	30 - 130	30	
Isophorone	ND	72	73	1.4	73	72	1.4	30 - 130	30	
Naphthalene	ND	68	69	1.5	70	69	1.4	30 - 130	30	
Nitrobenzene	ND	68	69	1.5	70	65	7.4	30 - 130	30	
N-Nitrosodimethylamine	ND	61	60	1.7	61	60	1.7	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	70	71	1.4	70	63	10.5	30 - 130	30	
N-Nitrosodiphenylamine	ND	85	85	0.0	83	79	4.9	30 - 130	30	
Pentachloronitrobenzene	ND	82	82	0.0	81	84	3.6	30 - 130	30	
Pentachlorophenol	ND	81	90	10.5	104	89	15.5	30 - 130	30	
Phenanthrene	ND	79	79	0.0	79	79	0.0	30 - 130	30	
Phenol	ND	72	74	2.7	72	72	0.0	30 - 130	30	
Pyrene	ND	80	80	0.0	79	82	3.7	30 - 130	30	
Pyridine	ND	27	27	0.0	27	27	0.0	30 - 130	30	l,m
% 2,4,6-Tribromophenol	92	81	83	2.4	82	81	1.2	15 - 130	30	
% 2-Fluorobiphenyl	78	70	72	2.8	72	70	2.8	30 - 130	30	
% 2-Fluorophenol	81	71	72	1.4	73	69	5.6	15 - 130	30	
% Nitrobenzene-d5	80	67	68	1.5	68	64	6.1	30 - 130	30	
% Phenol-d5	77	69	70	1.4	70	66	5.9	15 - 130	30	
% Terphenyl-d14	106	95	94	1.1	93	96	3.2	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Data

SDG I.D.: GBB79763

QA/QC Batch 199755, QC Sample No: BB79767 (BB79767, BB79768, BB79769)

Pesticides - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDD	ND	87	83	4.7				40 - 140	20
4,4' -DDE	ND	88	84	4.7				40 - 140	20
4,4' -DDT	ND	91	87	4.5				40 - 140	20
a-BHC	ND	84	82	2.4				40 - 140	20
a-Chlordane	ND	70	67	4.4				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	79	76	3.9				40 - 140	20
b-BHC	ND	83	80	3.7				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	96	93	3.2				40 - 140	20
Dieldrin	ND	85	83	2.4				40 - 140	20
Endosulfan I	ND	81	80	1.2				40 - 140	20
Endosulfan II	ND	89	86	3.4				40 - 140	20
Endosulfan sulfate	ND	79	76	3.9				40 - 140	20
Endrin	ND	90	88	2.2				40 - 140	20
Endrin aldehyde	ND	89	89	0.0				40 - 140	20
Endrin ketone	ND	92	89	3.3				40 - 140	20
g-BHC	ND	85	83	2.4				40 - 140	20
g-Chlordane	ND	84	81	3.6				40 - 140	20
Heptachlor	ND	94	88	6.6				40 - 140	20
Heptachlor epoxide	ND	82	79	3.7				40 - 140	20
Methoxychlor	ND	102	99	3.0				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	89	100	100	0.0				30 - 150	20
% TCMX	76	85	85	0.0				30 - 150	20

Comment:

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QA/QC Batch 199997, QC Sample No: BB79770 (BB79770)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	89	88	1.1				70 - 130	30
1,1,1-Trichloroethane	ND	106	102	3.8				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	112	116	3.5				70 - 130	30
1,1,2-Trichloroethane	ND	97	100	3.0				70 - 130	30
1,1-Dichloroethane	ND	102	100	2.0				70 - 130	30
1,1-Dichloroethene	ND	105	99	5.9				70 - 130	30
1,1-Dichloropropene	ND	96	91	5.3				70 - 130	30
1,2,3-Trichlorobenzene	ND	88	92	4.4				70 - 130	30
1,2,3-Trichloropropane	ND	113	119	5.2				70 - 130	30
1,2,4-Trichlorobenzene	ND	86	89	3.4				70 - 130	30
1,2,4-Trimethylbenzene	ND	107	105	1.9				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	87	93	6.7				70 - 130	30
1,2-Dichlorobenzene	ND	100	101	1.0				70 - 130	30
1,2-Dichloroethane	ND	100	100	0.0				70 - 130	30
1,2-Dichloropropane	ND	103	99	4.0				70 - 130	30
1,3,5-Trimethylbenzene	ND	108	106	1.9				70 - 130	30
1,3-Dichlorobenzene	ND	98	99	1.0				70 - 130	30
1,3-Dichloropropane	ND	107	109	1.9				70 - 130	30
1,4-Dichlorobenzene	ND	98	98	0.0				70 - 130	30
2,2-Dichloropropane	ND	53	54	1.9				70 - 130	30

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2-Chlorotoluene	ND	101	99	2.0				70 - 130	30
2-Hexanone	ND	91	99	8.4				70 - 130	30
2-Isopropyltoluene	ND	100	96	4.1				70 - 130	30
4-Chlorotoluene	ND	98	95	3.1				70 - 130	30
4-Methyl-2-pentanone	ND	100	109	8.6				70 - 130	30
Acetone	ND	114	130	13.1				70 - 130	30
Acrylonitrile	ND	109	114	4.5				70 - 130	30
Benzene	ND	99	96	3.1				70 - 130	30
Bromobenzene	ND	101	100	1.0				70 - 130	30
Bromochloromethane	ND	99	102	3.0				70 - 130	30
Bromodichloromethane	ND	97	94	3.1				70 - 130	30
Bromoform	ND	77	78	1.3				70 - 130	30
Bromomethane	ND	52	48	8.0				70 - 130	30
Carbon Disulfide	ND	99	95	4.1				70 - 130	30
Carbon tetrachloride	ND	93	87	6.7				70 - 130	30
Chlorobenzene	ND	99	97	2.0				70 - 130	30
Chloroethane	ND	103	100	3.0				70 - 130	30
Chloroform	ND	108	107	0.9				70 - 130	30
Chloromethane	ND	78	77	1.3				70 - 130	30
cis-1,2-Dichloroethene	ND	107	108	0.9				70 - 130	30
cis-1,3-Dichloropropene	ND	82	83	1.2				70 - 130	30
Dibromochloromethane	ND	87	88	1.1				70 - 130	30
Dibromoethane	ND	93	96	3.2				70 - 130	30
Dibromomethane	ND	104	106	1.9				70 - 130	30
Dichlorodifluoromethane	ND	96	89	7.6				70 - 130	30
Ethylbenzene	ND	103	98	5.0				70 - 130	30
Hexachlorobutadiene	ND	90	85	5.7				70 - 130	30
Isopropylbenzene	ND	101	97	4.0				70 - 130	30
m&p-Xylene	ND	101	98	3.0				70 - 130	30
Methyl ethyl ketone	ND	108	117	8.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	94	98	4.2				70 - 130	30
Methylene chloride	ND	115	119	3.4				70 - 130	30
Naphthalene	ND	90	98	8.5				70 - 130	30
n-Butylbenzene	ND	110	106	3.7				70 - 130	30
n-Propylbenzene	ND	94	91	3.2				70 - 130	30
o-Xylene	ND	103	99	4.0				70 - 130	30
p-Isopropyltoluene	ND	104	101	2.9				70 - 130	30
sec-Butylbenzene	ND	104	101	2.9				70 - 130	30
Styrene	ND	104	103	1.0				70 - 130	30
tert-Butylbenzene	ND	101	97	4.0				70 - 130	30
Tetrachloroethene	ND	87	84	3.5				70 - 130	30
Tetrahydrofuran (THF)	ND	104	117	11.8				70 - 130	30
Toluene	ND	93	93	0.0				70 - 130	30
trans-1,2-Dichloroethene	ND	104	103	1.0				70 - 130	30
trans-1,3-Dichloropropene	ND	78	82	5.0				70 - 130	30
trans-1,4-dichloro-2-butene	ND	64	77	18.4				70 - 130	30
Trichloroethene	ND	97	93	4.2				70 - 130	30
Trichlorofluoromethane	ND	130	120	8.0				70 - 130	30
Trichlorotrifluoroethane	ND	100	91	9.4				70 - 130	30
Vinyl chloride	ND	95	89	6.5				70 - 130	30
% 1,2-dichlorobenzene-d4	100	100	101	1.0				70 - 130	30
% Bromofluorobenzene	95	104	104	0.0				70 - 130	30
% Dibromofluoromethane	104	100	104	3.9				70 - 130	30

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Toluene-d8	97	94	96	2.1				70 - 130	30	

Comment:

Due to poor instrument purge, the MS/MSD is not reported for this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 200109, QC Sample No: BB80114 (BB79767, BB79768, BB79769)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	84	82	2.4	97	93	4.2	70 - 130	30	
1,1,1-Trichloroethane	ND	107	102	4.8	131	124	5.5	70 - 130	30	m
1,1,2,2-Tetrachloroethane	ND	98	96	2.1	108	109	0.9	70 - 130	30	
1,1,2-Trichloroethane	ND	71	70	1.4	82	78	5.0	70 - 130	30	
1,1-Dichloroethane	ND	102	98	4.0	116	112	3.5	70 - 130	30	
1,1-Dichloroethene	ND	109	101	7.6	131	124	5.5	70 - 130	30	m
1,1-Dichloropropene	ND	95	91	4.3	114	107	6.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	121	118	2.5	125	130	3.9	70 - 130	30	
1,2,3-Trichloropropane	ND	102	100	2.0	109	112	2.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	109	106	2.8	115	115	0.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	100	99	1.0	110	106	3.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	96	93	3.2	102	106	3.8	70 - 130	30	
1,2-Dichlorobenzene	ND	98	95	3.1	109	110	0.9	70 - 130	30	
1,2-Dichloroethane	ND	89	89	0.0	103	100	3.0	70 - 130	30	
1,2-Dichloropropane	ND	96	94	2.1	109	105	3.7	70 - 130	30	
1,3,5-Trimethylbenzene	ND	102	100	2.0	109	105	3.7	70 - 130	30	
1,3-Dichlorobenzene	ND	98	95	3.1	107	104	2.8	70 - 130	30	
1,3-Dichloropropane	ND	81	79	2.5	99	89	10.6	70 - 130	30	
1,4-Dichlorobenzene	ND	96	93	3.2	107	102	4.8	70 - 130	30	
2,2-Dichloropropane	ND	62	58	6.7	62	61	1.6	70 - 130	30	l,m
2-Chlorotoluene	ND	97	94	3.1	107	103	3.8	70 - 130	30	
2-Hexanone	ND	85	81	4.8	81	82	1.2	70 - 130	30	
2-Isopropyltoluene	ND	94	91	3.2	95	92	3.2	70 - 130	30	
4-Chlorotoluene	ND	92	90	2.2	104	100	3.9	70 - 130	30	
4-Methyl-2-pentanone	ND	71	69	2.9	70	68	2.9	70 - 130	30	l,m
Acetone	ND	96	88	8.7	88	102	14.7	70 - 130	30	
Acrylonitrile	ND	97	95	2.1	94	84	11.2	70 - 130	30	
Benzene	ND	99	96	3.1	112	108	3.6	70 - 130	30	
Bromobenzene	ND	96	93	3.2	106	104	1.9	70 - 130	30	
Bromochloromethane	ND	97	94	3.1	109	107	1.9	70 - 130	30	
Bromodichloromethane	ND	87	85	2.3	100	96	4.1	70 - 130	30	
Bromoform	ND	72	71	1.4	86	85	1.2	70 - 130	30	
Bromomethane	ND	53	57	7.3	68	75	9.8	70 - 130	30	l,m
Carbon Disulfide	ND	103	97	6.0	99	95	4.1	70 - 130	30	
Carbon tetrachloride	ND	92	87	5.6	113	108	4.5	70 - 130	30	
Chlorobenzene	ND	93	91	2.2	108	104	3.8	70 - 130	30	
Chloroethane	ND	105	102	2.9	124	117	5.8	70 - 130	30	
Chloroform	ND	107	104	2.8	122	117	4.2	70 - 130	30	
Chloromethane	ND	77	72	6.7	86	81	6.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	109	105	3.7	122	117	4.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	60	59	1.7	70	68	2.9	70 - 130	30	l,m
Dibromochloromethane	ND	75	73	2.7	89	86	3.4	70 - 130	30	
Dibromoethane	ND	69	70	1.4	90	84	6.9	70 - 130	30	l
Dibromomethane	ND	96	95	1.0	108	105	2.8	70 - 130	30	
Dichlorodifluoromethane	ND	100	93	7.3	113	105	7.3	70 - 130	30	
Ethylbenzene	ND	100	96	4.1	112	107	4.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Hexachlorobutadiene	ND	84	80	4.9	92	93	1.1	70 - 130	30	
Isopropylbenzene	ND	95	92	3.2	106	102	3.8	70 - 130	30	
m&p-Xylene	ND	99	96	3.1	111	106	4.6	70 - 130	30	
Methyl ethyl ketone	ND	110	90	20.0	84	94	11.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	91	90	1.1	89	89	0.0	70 - 130	30	
Methylene chloride	ND	110	107	2.8	118	118	0.0	70 - 130	30	
Naphthalene	ND	136	136	0.0	142	150	5.5	70 - 130	30	l,m
n-Butylbenzene	ND	103	99	4.0	109	105	3.7	70 - 130	30	
n-Propylbenzene	ND	92	88	4.4	107	100	6.8	70 - 130	30	
o-Xylene	ND	97	94	3.1	103	98	5.0	70 - 130	30	
p-Isopropyltoluene	ND	100	96	4.1	107	101	5.8	70 - 130	30	
sec-Butylbenzene	ND	98	93	5.2	111	107	3.7	70 - 130	30	
Styrene	ND	100	98	2.0	100	98	2.0	70 - 130	30	
tert-Butylbenzene	ND	95	92	3.2	108	104	3.8	70 - 130	30	
Tetrachloroethene	ND	81	78	3.8	97	91	6.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	95	94	1.1	106	97	8.9	70 - 130	30	
Toluene	ND	74	72	2.7	86	80	7.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	108	103	4.7	122	117	4.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	59	57	3.4	66	64	3.1	70 - 130	30	l,m
trans-1,4-dichloro-2-butene	ND	76	76	0.0	68	71	4.3	70 - 130	30	m
Trichloroethene	ND	97	94	3.1	113	108	4.5	70 - 130	30	
Trichlorofluoromethane	ND	130	122	6.3	143	134	6.5	70 - 130	30	m
Trichlorotrifluoroethane	ND	104	96	8.0	113	106	6.4	70 - 130	30	
Vinyl chloride	ND	86	82	4.8	100	94	6.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	100	99	1.0	99	102	3.0	70 - 130	30	
% Bromofluorobenzene	94	99	99	0.0	97	101	4.0	70 - 130	30	
% Dibromofluoromethane	107	105	102	2.9	106	106	0.0	70 - 130	30	
% Toluene-d8	76	75	75	0.0	78	75	3.9	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199750, QC Sample No: BB80114 (BB79767)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	44	42	4.7	39	41	5.0	30 - 130	20	
1,2,4-Trichlorobenzene	ND	70	66	5.9	61	65	6.3	30 - 130	20	
1,2-Dichlorobenzene	ND	68	63	7.6	56	61	8.5	30 - 130	20	
1,3-Dichlorobenzene	ND	68	64	6.1	57	61	6.8	30 - 130	20	
1,4-Dichlorobenzene	ND	70	65	7.4	58	63	8.3	30 - 130	20	
2,4,5-Trichlorophenol	ND	81	78	3.8	80	89	10.7	30 - 130	20	
2,4,6-Trichlorophenol	ND	79	76	3.9	75	83	10.1	30 - 130	20	
2,4-Dichlorophenol	ND	77	74	4.0	72	78	8.0	30 - 130	20	
2,4-Dimethylphenol	ND	54	50	7.7	46	50	8.3	30 - 130	20	
2,4-Dinitrophenol	ND	26	40	42.4	77	94	19.9	30 - 130	20	l,r
2,4-Dinitrotoluene	ND	76	73	4.0	71	78	9.4	30 - 130	20	
2,6-Dinitrotoluene	ND	79	76	3.9	74	79	6.5	30 - 130	20	
2-Chloronaphthalene	ND	82	77	6.3	75	80	6.5	30 - 130	20	
2-Chlorophenol	ND	69	65	6.0	60	65	8.0	30 - 130	20	
2-Methylnaphthalene	ND	72	68	5.7	63	67	6.2	30 - 130	20	
2-Methylphenol (o-cresol)	ND	67	62	7.8	45	51	12.5	30 - 130	20	
2-Nitroaniline	ND	>150	>150	NC	37	33	11.4	30 - 130	20	l
2-Nitrophenol	ND	77	72	6.7	71	77	8.1	30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	69	66	4.4	54	58	7.1	30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC	N/A	N/A	NC	30 - 130	20	

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
3-Nitroaniline	ND	82	78	5.0	35	39	10.8	30 - 130	20	
4,6-Dinitro-2-methylphenol	ND	72	69	4.3	88	96	8.7	30 - 130	20	
4-Bromophenyl phenyl ether	ND	81	77	5.1	74	77	4.0	30 - 130	20	
4-Chloro-3-methylphenol	ND	78	75	3.9	69	74	7.0	30 - 130	20	
4-Chloroaniline	ND	>150	>150	NC	19	19	0.0	30 - 130	20	l,m
4-Chlorophenyl phenyl ether	ND	81	77	5.1	75	79	5.2	30 - 130	20	
4-Nitroaniline	ND	82	78	5.0	35	39	10.8	30 - 130	20	
4-Nitrophenol	ND	58	56	3.5	80	91	12.9	30 - 130	20	
Acenaphthene	ND	75	72	4.1	44	47	6.6	30 - 130	20	
Acenaphthylene	ND	76	72	5.4	34	36	5.7	30 - 130	20	
Acetophenone	ND	35	33	5.9	31	33	6.3	30 - 130	20	
Aniline	ND	N/A	N/A	NC	N/A	N/A	NC	30 - 130	20	
Anthracene	ND	78	75	3.9	41	44	7.1	30 - 130	20	
Azobenzene	ND	38	36	5.4	17	18	5.7	30 - 130	20	m
Benz(a)anthracene	ND	87	83	4.7	42	45	6.9	30 - 130	20	
Benzidine	ND	N/A	N/A	NC	N/A	N/A	NC	30 - 130	20	
Benzo(a)pyrene	ND	73	71	2.8	33	35	5.9	30 - 130	20	
Benzo(b)fluoranthene	ND	74	72	2.7	36	39	8.0	30 - 130	20	
Benzo(ghi)perylene	ND	77	74	4.0	36	38	5.4	30 - 130	20	
Benzo(k)fluoranthene	ND	83	76	8.8	33	33	0.0	30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC	N/A	N/A	NC	30 - 130	20	
Benzyl butyl phthalate	ND	82	76	7.6	36	37	2.7	30 - 130	20	
Bis(2-chloroethoxy)methane	ND	74	69	7.0	31	34	9.2	30 - 130	20	
Bis(2-chloroethyl)ether	ND	65	60	8.0	56	60	6.9	30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	66	61	7.9	56	59	5.2	30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	86	79	8.5	38	39	2.6	30 - 130	20	
Carbazole	ND	113	109	3.6	51	56	9.3	30 - 130	20	
Chrysene	ND	78	74	5.3	40	43	7.2	30 - 130	20	
Dibenz(a,h)anthracene	ND	79	76	3.9	39	42	7.4	30 - 130	20	
Dibenzofuran	ND	75	72	4.1	70	74	5.6	30 - 130	20	
Diethyl phthalate	ND	83	78	6.2	38	42	10.0	30 - 130	20	
Dimethylphthalate	ND	84	80	4.9	38	41	7.6	30 - 130	20	
Di-n-butylphthalate	ND	88	83	5.8	36	38	5.4	30 - 130	20	
Di-n-octylphthalate	ND	82	78	5.0	37	38	2.7	30 - 130	20	
Fluoranthene	ND	78	76	2.6	41	44	7.1	30 - 130	20	
Fluorene	ND	77	74	4.0	67	72	7.2	30 - 130	20	
Hexachlorobenzene	ND	83	79	4.9	75	79	5.2	30 - 130	20	
Hexachlorobutadiene	ND	75	71	5.5	64	69	7.5	30 - 130	20	
Hexachlorocyclopentadiene	ND	28	29	3.5	36	40	10.5	30 - 130	20	l
Hexachloroethane	ND	69	65	6.0	57	62	8.4	30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	77	74	4.0	36	38	5.4	30 - 130	20	
Isophorone	ND	77	72	6.7	67	72	7.2	30 - 130	20	
Naphthalene	ND	71	67	5.8	62	67	7.8	30 - 130	20	
Nitrobenzene	ND	69	66	4.4	84	91	8.0	30 - 130	20	
N-Nitrosodimethylamine	ND	67	64	4.6	46	47	2.2	30 - 130	20	
N-Nitrosodi-n-propylamine	ND	71	66	7.3	60	65	8.0	30 - 130	20	
N-Nitrosodiphenylamine	ND	83	80	3.7	52	57	9.2	30 - 130	20	
Pentachloronitrobenzene	ND	93	88	5.5	86	90	4.5	30 - 130	20	
Pentachlorophenol	ND	39	43	9.8	85	97	13.2	30 - 130	20	
Phenanthrene	ND	80	77	3.8	69	73	5.6	30 - 130	20	
Phenol	ND	64	60	6.5	52	56	7.4	30 - 130	20	
Pyrene	ND	80	77	3.8	37	40	7.8	30 - 130	20	
Pyridine	ND	17	18	5.7	<5	<5	NC	30 - 130	20	l,m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% 2,4,6-Tribromophenol	125	75	73	2.7	81	83	2.4	15 - 130	20	
% 2-Fluorobiphenyl	77	70	67	4.4	64	68	6.1	30 - 130	20	
% 2-Fluorophenol	74	60	56	6.9	50	55	9.5	15 - 130	20	
% Nitrobenzene-d5	84	68	64	6.1	59	65	9.7	30 - 130	20	
% Phenol-d5	71	61	57	6.8	26	29	10.9	15 - 130	20	
% Terphenyl-d14	116	88	85	3.5	43	46	6.7	30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 199810, QC Sample No: BB80386 (BB79763, BB79764, BB79765, BB79766)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	92	87	5.6	84	82	2.4	70 - 130	30	
1,1,1-Trichloroethane	ND	90	89	1.1	86	90	4.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	84	82	2.4	129	114	12.3	70 - 130	30	
1,1,2-Trichloroethane	ND	92	88	4.4	96	91	5.3	70 - 130	30	
1,1-Dichloroethane	ND	90	91	1.1	108	112	3.6	70 - 130	30	
1,1-Dichloroethene	ND	92	90	2.2	124	118	5.0	70 - 130	30	
1,1-Dichloropropene	ND	93	93	0.0	95	99	4.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	76	73	4.0	47	51	8.2	70 - 130	30	m
1,2,3-Trichloropropane	ND	89	82	8.2	118	100	16.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	70	65	7.4	53	56	5.5	70 - 130	30	l,m
1,2,4-Trimethylbenzene	ND	84	73	14.0	88	80	9.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	95	93	2.1	97	89	8.6	70 - 130	30	
1,2-Dichlorobenzene	ND	81	74	9.0	85	79	7.3	70 - 130	30	
1,2-Dichloroethane	ND	86	83	3.6	77	77	0.0	70 - 130	30	
1,2-Dichloropropane	ND	93	92	1.1	107	109	1.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	87	76	13.5	99	93	6.3	70 - 130	30	
1,3-Dichlorobenzene	ND	80	71	11.9	85	82	3.6	70 - 130	30	
1,3-Dichloropropane	ND	93	87	6.7	99	95	4.1	70 - 130	30	
1,4-Dichlorobenzene	ND	78	69	12.2	83	81	2.4	70 - 130	30	l
2,2-Dichloropropane	ND	85	86	1.2	84	87	3.5	70 - 130	30	
2-Chlorotoluene	ND	86	78	9.8	105	101	3.9	70 - 130	30	
2-Hexanone	ND	76	75	1.3	<40	<40	NC	70 - 130	30	m
2-Isopropyltoluene	ND	96	83	14.5	101	100	1.0	70 - 130	30	
4-Chlorotoluene	ND	80	72	10.5	96	94	2.1	70 - 130	30	
4-Methyl-2-pentanone	ND	101	97	4.0	77	72	6.7	70 - 130	30	
Acetone	ND	74	70	5.6	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	105	101	3.9	82	81	1.2	70 - 130	30	
Benzene	ND	94	93	1.1	100	105	4.9	70 - 130	30	
Bromobenzene	ND	87	81	7.1	95	90	5.4	70 - 130	30	
Bromochloromethane	ND	92	90	2.2	103	102	1.0	70 - 130	30	
Bromodichloromethane	ND	90	88	2.2	82	82	0.0	70 - 130	30	
Bromoform	ND	90	85	5.7	70	67	4.4	70 - 130	30	m
Bromomethane	ND	92	95	3.2	72	61	16.5	70 - 130	30	m
Carbon Disulfide	ND	112	104	7.4	113	103	9.3	70 - 130	30	
Carbon tetrachloride	ND	92	90	2.2	74	76	2.7	70 - 130	30	
Chlorobenzene	ND	88	82	7.1	92	91	1.1	70 - 130	30	
Chloroethane	ND	95	93	2.1	132	124	6.3	70 - 130	30	m
Chloroform	ND	88	88	0.0	94	96	2.1	70 - 130	30	
Chloromethane	ND	92	99	7.3	120	142	16.8	70 - 130	30	m
cis-1,2-Dichloroethene	ND	90	90	0.0	105	113	7.3	70 - 130	30	
cis-1,3-Dichloropropene	ND	88	86	2.3	83	83	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromochloromethane	ND	91	86	5.6	80	76	5.1	70 - 130	30	
Dibromoethane	ND	92	87	5.6	87	84	3.5	70 - 130	30	
Dibromomethane	ND	91	87	4.5	93	92	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	88	91	3.4	94	99	5.2	70 - 130	30	
Ethylbenzene	ND	91	85	6.8	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	75	57	27.3	63	63	0.0	70 - 130	30	l,m
Isopropylbenzene	ND	89	83	7.0	116	114	1.7	70 - 130	30	
m&p-Xylene	ND	90	81	10.5	90	90	0.0	70 - 130	30	
Methyl ethyl ketone	ND	91	80	12.9	49	46	6.3	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	106	96	9.9	99	88	11.8	70 - 130	30	
Methylene chloride	ND	91	85	6.8	124	111	11.1	70 - 130	30	
Naphthalene	ND	80	95	17.1	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	79	64	21.0	92	90	2.2	70 - 130	30	l
n-Propylbenzene	ND	82	71	14.4	109	108	0.9	70 - 130	30	
o-Xylene	ND	97	88	9.7	93	94	1.1	70 - 130	30	
p-Isopropyltoluene	ND	87	72	18.9	99	97	2.0	70 - 130	30	
sec-Butylbenzene	ND	85	73	15.2	109	106	2.8	70 - 130	30	
Styrene	ND	96	85	12.2	77	74	4.0	70 - 130	30	
tert-Butylbenzene	ND	88	78	12.0	109	107	1.9	70 - 130	30	
Tetrachloroethene	ND	92	85	7.9	90	91	1.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	103	100	3.0	131	121	7.9	70 - 130	30	m
Toluene	ND	92	89	3.3	93	96	3.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	82	16.8	116	105	10.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	86	83	3.6	75	76	1.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	93	5.2	95	83	13.5	70 - 130	30	
Trichloroethene	ND	96	93	3.2	88	93	5.5	70 - 130	30	
Trichlorofluoromethane	ND	106	103	2.9	90	91	1.1	70 - 130	30	
Trichlorotrifluoroethane	ND	102	103	1.0	115	107	7.2	70 - 130	30	
Vinyl chloride	ND	97	97	0.0	133	138	3.7	70 - 130	30	m
% 1,2-dichlorobenzene-d4	100	99	98	1.0	101	98	3.0	70 - 130	30	
% Bromofluorobenzene	89	98	97	1.0	85	85	0.0	70 - 130	30	
% Dibromofluoromethane	96	101	102	1.0	99	102	3.0	70 - 130	30	
% Toluene-d8	100	100	99	1.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199838, QC Sample No: BB80503 (BB79768, BB79769)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	34	35	2.9				30 - 130	20	
1,2,4-Trichlorobenzene	ND	58	56	3.5				30 - 130	20	
1,2-Dichlorobenzene	ND	67	65	3.0				30 - 130	20	
1,3-Dichlorobenzene	ND	62	61	1.6				30 - 130	20	
1,4-Dichlorobenzene	ND	67	62	7.8				30 - 130	20	
2,4,5-Trichlorophenol	ND	77	78	1.3				30 - 130	20	
2,4,6-Trichlorophenol	ND	76	78	2.6				30 - 130	20	
2,4-Dichlorophenol	ND	70	67	4.4				30 - 130	20	
2,4-Dimethylphenol	ND	46	45	2.2				30 - 130	20	
2,4-Dinitrophenol	ND	19	19	0.0				30 - 130	20	l
2,4-Dinitrotoluene	ND	76	78	2.6				30 - 130	20	
2,6-Dinitrotoluene	ND	78	78	0.0				30 - 130	20	
2-Chloronaphthalene	ND	67	70	4.4				30 - 130	20	
2-Chlorophenol	ND	73	72	1.4				30 - 130	20	
2-Methylnaphthalene	ND	63	61	3.2				30 - 130	20	

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Methylphenol (o-cresol)	ND	75	74	1.3				30 - 130	20	
2-Nitroaniline	ND	130	133	2.3				30 - 130	20	I
2-Nitrophenol	ND	61	62	1.6				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	69	69	0.0				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	133	131	1.5				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	67	68	1.5				30 - 130	20	
4-Bromophenyl phenyl ether	ND	72	76	5.4				30 - 130	20	
4-Chloro-3-methylphenol	ND	76	78	2.6				30 - 130	20	
4-Chloroaniline	ND	89	91	2.2				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	75	75	0.0				30 - 130	20	
4-Nitroaniline	ND	85	84	1.2				30 - 130	20	
4-Nitrophenol	ND	86	89	3.4				30 - 130	20	
Acenaphthene	ND	73	73	0.0				30 - 130	20	
Acenaphthylene	ND	72	74	2.7				30 - 130	20	
Acetophenone	ND	35	35	0.0				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	80	81	1.2				30 - 130	20	
Azobenzene	ND	39	39	0.0				30 - 130	20	
Benz(a)anthracene	ND	82	81	1.2				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				10 - 130	20	
Benzo(a)pyrene	ND	75	76	1.3				30 - 130	20	
Benzo(b)fluoranthene	ND	80	82	2.5				30 - 130	20	
Benzo(ghi)perylene	ND	77	79	2.6				30 - 130	20	
Benzo(k)fluoranthene	ND	81	82	1.2				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	87	88	1.1				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	70	71	1.4				30 - 130	20	
Bis(2-chloroethyl)ether	ND	72	68	5.7				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	80	75	6.5				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	95	96	1.0				30 - 130	20	
Carbazole	ND	100	100	0.0				30 - 130	20	
Chrysene	ND	78	81	3.8				30 - 130	20	
Dibenz(a,h)anthracene	ND	77	79	2.6				30 - 130	20	
Dibenzofuran	ND	73	73	0.0				30 - 130	20	
Diethyl phthalate	ND	81	83	2.4				30 - 130	20	
Dimethylphthalate	ND	79	79	0.0				30 - 130	20	
Di-n-butylphthalate	ND	87	87	0.0				30 - 130	20	
Di-n-octylphthalate	ND	96	97	1.0				30 - 130	20	
Fluoranthene	ND	76	79	3.9				30 - 130	20	
Fluorene	ND	75	76	1.3				30 - 130	20	
Hexachlorobenzene	ND	74	77	4.0				30 - 130	20	
Hexachlorobutadiene	ND	55	54	1.8				30 - 130	20	
Hexachlorocyclopentadiene	ND	23	24	4.3				30 - 130	20	I
Hexachloroethane	ND	62	62	0.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	76	77	1.3				30 - 130	20	
Isophorone	ND	70	68	2.9				30 - 130	20	
Naphthalene	ND	64	63	1.6				30 - 130	20	
Nitrobenzene	ND	73	71	2.8				30 - 130	20	
N-Nitrosodimethylamine	ND	49	48	2.1				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	67	67	0.0				30 - 130	20	
N-Nitrosodiphenylamine	ND	84	84	0.0				30 - 130	20	
Pentachloronitrobenzene	ND	79	81	2.5				30 - 130	20	

QA/QC Data

SDG I.D.: GBB79763

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pentachlorophenol	ND	47	53	12.0				30 - 130	20	
Phenanthrene	ND	80	80	0.0				30 - 130	20	
Phenol	ND	68	67	1.5				30 - 130	20	
Pyrene	ND	79	79	0.0				30 - 130	20	
Pyridine	ND	14	14	0.0				30 - 130	20	l
% 2,4,6-Tribromophenol	113	81	78	3.8				15 - 130	20	
% 2-Fluorobiphenyl	73	64	65	1.6				30 - 130	20	
% 2-Fluorophenol	69	62	62	0.0				15 - 130	20	
% Nitrobenzene-d5	83	70	69	1.4				30 - 130	20	
% Phenol-d5	71	68	66	3.0				15 - 130	20	
% Terphenyl-d14	119	88	89	1.1				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 199989, QC Sample No: BB80763 (BB79767, BB79768, BB79769)

TPH by GC (Extractable Products) - Ground Water

Ext. Petroleum HC	ND	107	107	0.0	124	123	0.8	50 - 150	20
% n-Pentacosane	100	126	124	1.6	145	145	0.0	50 - 150	20

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 11, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79763

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79763	MAGU-NH	$8260MAR	Acrylonitrile	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	100	100	ug/Kg
BB79763	MAGU-NH	$8260MAR	Benzene	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	200	200	ug/Kg
BB79763	MAGU-NH	$8260MAR	1,2-Dichloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	200	200	ug/Kg
BB79763	MAGU-NH	$8260MAR	Bromodichloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	110	110	ug/Kg
BB79763	MAGU-NH	$8260MAR	Dibromoethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	100	100	ug/Kg
BB79763	MAGU-NH	$8260MAR	Dibromoethane	mg/kg	CT	Volatile Organic Compound	RES DEC (mg/kg)	ND	270	7	7	ug/Kg
BB79763	MAGU-NH	$8260MAR	Dibromochloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	160	100	100	ug/Kg
BB79763	MAGU-NH	$8260MAR	1,1,1,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	270	200	200	ug/Kg
BB79763	MAGU-NH	$8260MAR	1,1,2,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	160	100	100	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	140	140	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1800	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	5300	1200	1200	ug/Kg
BB79763	MAGU-NH	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	400	400	ug/Kg
BB79763	MAGU-NH	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2900	2800	2800	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Dibenzofuran	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	1300	5600	5600	ug/Kg
BB79763	MAGU-NH	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2900	1650	1650	ug/Kg
BB79763	MAGU-NH	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	1400	1400	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1800	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Phenanthrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	94000	1300	40000	40000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	11000	2800	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	96000	1300	56000	56000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	81000	1300	40000	40000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	41000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	41000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	36000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	330	330	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	44000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	44000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	17000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	17000	1300	8400	8400	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	35000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	35000	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	8800	1300	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79763

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79763	MAGU-NH	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	8800	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1300	1000	1000	ug/Kg
BB79763	MAGU-NH	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	910	22	500	500	mg/Kg
BB79763	MAGU-NH	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	520	4.0	400	400	mg/Kg
BB79763	MAGU-NH	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.37	0.010	0.15	0.15	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-NH

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB79763, BB79764, BB79765, BB79766, BB79767, BB79768, BB79769, BB79770

Sampling Date(s): 5/1/2012

RCP Methods Used:

☑ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☑ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, SVOA Narration, SVOASIM Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Friday, May 11, 2012

Printed Name: Greg Lawrence

Position: Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

The following analytes from the 6010 RCP Metals list were not reported: Antimony, Beryllium, Copper, Nickel, Thallium, Vanadium, Zinc.

For sample ID BB79763 - Due to the concentration of constituents not all of the compounds met the requested criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/04/12-1 (BB79763)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/4/2012

Instrument: Au-fid84 05/07/12-1 (BB79767, BB79768, BB79769)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/7/2012

Instrument: Au-xl1 05/03/12-1 (BB79764, BB79765, BB79766)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/3/2012

QC Comments: QC Batch 99642 05/01/12 (BB79763, BB79764, BB79765, BB79766)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.

QC (Batch Specific)

---------- Sample No: BB79564, QA/QC Batch: 199642 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80763, QA/QC Batch: 199989 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199629 (Samples: BB79763, BB79764, BB79765, BB79766): -----

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichloroprop)

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Dinoseb)

Instrument: Au-ecd14 05/03/12-1 (BB79763, BB79764, BB79765, BB79766)

Initial Calibration ECD14-043012
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/3/2012

Instrument: Au-ecd14 05/07/12-1 (BB79767, BB79768, BB79769)

Initial Calibration ECD14-050412
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/7/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC Comments: QC Batch 99629 05/01/12 (BB79763, BB79764, BB79765, BB79766)

The MS/MSD recovery could not be determined for this compound due to the interference from a non-target peak.

QC (Batch Specific)

---------- Sample No: BB77175, QA/QC Batch: 199256 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB79026, QA/QC Batch: 199629 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: Dichloroprop(37%), Dinoseb(20%)

All LCSD recoveries were within 40 - 140 with the following exceptions: Dinoseb(32%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Dinoseb(46.2%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/03/12-1 (BB79763, BB79764, BB79765, BB79766, BB79767, BB79768, BB79769)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/3/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79767, QA/QC Batch: 199773 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB74627, QA/QC Batch: 199772 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80166, QA/QC Batch: 199774 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/02/12-1 (BB79767, BB79768, BB79769)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Peter LaBarre
Position: Chemist
Date: 5/2/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

Instrument: Icp10 05/06/12-1 (BB79767, BB79768, BB79769)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/6/2012

Instrument: Icp9 05/04/12-1 (BB79765, BB79766)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/4/2012

Instrument: Icp9 05/05/12-1 (BB79763, BB79764, BB79765, BB79766)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/5/2012

Instrument: Icp9 05/06/12-1 (BB79763, BB79764, BB79765, BB79766)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/6/2012

Instrument: Icp9 05/07/12-1 (BB79764)

The initial calibration met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/7/2012

Instrument: Icp9 05/08/12-1 (BB79763, BB79764, BB79765, BB79766, BB79767, BB79768, BB79769)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/8/2012

Instrument: Icp9 05/09/12-1 (BB79763, BB79764, BB79765, BB79766, BB79767, BB79768, BB79769)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/9/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79764, QA/QC Batch: 199775 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB79294, QA/QC Batch: 199646 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB79515, QA/QC Batch: 199726 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB79740, QA/QC Batch: 199743 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB80629, QA/QC Batch: 199961 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd2 05/08/12-1 (BB79766)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/8/2012

Instrument: Au-ecd5 05/08/12-1 (BB79766)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/8/2012

Instrument: Au-ecd5 05/09/12-1 (BB79766)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/9/2012

Instrument: Au-ecd6 05/04/12-1 (BB79765, BB79766)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

Printed Name Michael Hahn
Position: Chemist
Date: 5/4/2012

Instrument: Au-ecd7 05/03/12-1 (BB79767, BB79768, BB79769)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/3/2012

Instrument: Au-ecd8 05/03/12-1 (BB79763, BB79764, BB79765, BB79766)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/3/2012

QC Comments: QC Batch 99649 05/01/12 (BB79767, BB79768, BB79769)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79766, QA/QC Batch: 199724 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 40 - 140 with the following exceptions: None.

All MSD recoveries were within 40 - 140 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB78909, QA/QC Batch: 199649 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 05/03/12-1 (BB79763, BB79764, BB79765, BB79766, BB79767, BB79768, BB79769)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/3/2012

QC Comments: QC Batch 99755 05/02/12 (BB79767, BB79768, BB79769)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79766, QA/QC Batch: 199744 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB79767, QA/QC Batch: 199755 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB79026, QA/QC Batch: 199619 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199719 (Samples: BB79763, BB79764, BB79765, BB79766): -----

One or more analytes is below the criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, Pyridine)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 4-Chloroaniline)

QC Batch 199750 (Samples: BB79767): -----

One or more analytes is below the lower range but within the method criteria. A low bias for these analytes is possible. (2,4-Dinitrophenol, Hexachlorocyclopentadiene, Pyridine)

The LCS/LCSD recoveries are above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline)

Instrument: Chem12 05/02/12-1 (BB79763, BB79764, BB79765, BB79766)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 5/2/2012

Instrument: Chem12 05/03/12-1 (BB79763)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: 4-Chloroaniline, 2-Nitroaniline

Printed Name Damien Drobinski
Position: Chemist
Date: 5/3/2012

Instrument: Chem12 05/06/12-1 (BB79767, BB79768, BB79769)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0502):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration:

Printed Name Damien Drobinski
Position: Chemist
Date: 5/6/2012

QC Comments: QC Batch 99838 05/03/12 (BB79768, BB79769)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79766, QA/QC Batch: 199719 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4-Chloroaniline(149%), Pyridine(27%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(8.2%), 2-Nitroaniline(>150%), 4-Chloroaniline(146%), Pyridine(27%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4-Chloroaniline(133%), Pyridine(27%)

All MSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), Pyridine(27%)

All MS/MSD RPDs were less than 30% with the following exceptions: Aniline(40.0%), Hexachlorocyclopentadiene(42.4%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80114, QA/QC Batch: 199750 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(26%), 2-Nitroaniline(>150%), 4-Chloroaniline(>150%), Hexachlorocyclopentadiene(28%), Pyridine(17%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(>150%), 4-Chloroaniline(>150%), Hexachlorocyclopentadiene(29%), Pyridine(18%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4-Dinitrophenol(42.4%)

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199838 (Samples: BB79768, BB79769): -----

One or more analytes is below the lower range but within the method criteria. A low bias for these analytes is possible. (2,4-Dinitrophenol, Hexachlorocyclopentadiene, Pyridine)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline)

The LCS/LCSD recoveries are above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (3-Nitroaniline)

Instrument: Chem04 05/04/12-1 (BB79767, BB79768, BB79769)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0424):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Atrazine, Pentachloronitrobenzene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/4/2012

QC Comments: QC Batch 99838 05/03/12 (BB79768, BB79769)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB80503, QA/QC Batch: 199838 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 3-Nitroaniline(133%), Hexachlorocyclopentadiene(23%), Pyridine(14%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), 2-Nitroaniline(133%), 3-Nitroaniline(131%), Hexachlorocyclopentadiene(24%), Pyridine(14%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199810 (Samples: BB79763, BB79764, BB79765, BB79766): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (1,2,4-Trichlorobenzene, Hexachlorobutadiene)

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (1,4-Dichlorobenzene, n-Butylbenzene)

QC Batch 199997 (Samples: BB79770): -----

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (trans-1,4-dichloro-2-butene)

The LCS/LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane, Bromomethane)

QC Batch 200109 (Samples: BB79767, BB79768, BB79769): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (cis-1,3-Dichloropropene)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (4-Methyl-2-pentanone)

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dibromoethane)

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane, trans-1,3-Dichloropropene)

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Bromomethane)

The QC recovery for one or more analytes is above the upper range, therefore a slight high bias is possible. (Naphthalene)

Instrument: Chem03 05/02/12-1 (BB79763, BB79764, BB79765, BB79766)

Initial Calibration Verification (RCPS_0502):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Acrolein, Acetone and Methyl Ethyl Ketone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Tetrahydrofuran (THF)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

Printed Name Johanna Harrington
Position: Chemist
Date: 5/2/2012

Instrument: Chem08 05/03/12-2 (BB79770)

S -Side
Initial Calibration(RCPS_0429:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Acetone

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: Bromomethane, 2,2-Dichloropropane, trans-1,4-Dichloro-2-butene

Printed Name Tina Covensky
Position: Chemist
Date: 5/3/2012

Instrument: Chem08 05/04/12-2 (BB79767, BB79768, BB79769)

S -Side
Initial Calibration(RCPS_0429:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%:

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: Bromomethane, Acrolein, 2,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Naphthalene

Printed Name Tina Covensky
Position: Chemist
Date: 5/4/2012

QC Comments: QC Batch 99997 05/04/12 (BB79770)

Due to poor instrument purge, the MS/MSD is not reported for this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 11, 2012

SDG I.D.: GBB79763

QC (Site Specific)

---------- Sample No: BB79770, QA/QC Batch: 199997 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(53%), Bromomethane(52%), trans-1,4-dichloro-2-butene(64%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(54%), Bromomethane(48%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80114, QA/QC Batch: 200109 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(62%), Bromomethane(53%), cis-1,3-Dichloropropene(60%), Dibromoethane(69%), Naphthalene(136%), trans-1,3-Dichloropropene(59%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(58%), 4-Methyl-2-pentanone(69%), Bromomethane(57%), cis-1,3-Dichloropropene(59%), Naphthalene(136%), trans-1,3-Dichloropropene(57%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB80386, QA/QC Batch: 199810 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,2,4-Trichlorobenzene(65%), 1,4-Dichlorobenzene(69%), Hexachlorobutadiene(57%), n-Butylbenzene(64%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-1-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Dissolved RCRA 8 Metals					Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [1] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
79763	GP-37 10'-12'	S	5-1-12	6:21am	X	X	X	X	X	X	X						3	2								
79764	GP-38 10'-12'	↓	↓	7:24am	↓	↓	↓	↓	↓	↓	↓						3	2								
79765	GP-39 10'-12'	↓	↓	7:57am	↓	↓	↓	↓	↓	↓	↓						3	2								
79766	GP-40 10'-12'	↓	↓	10:15am	↓	↓	↓	↓	↓	↓	↓						3	2								
79767	GP-37 GW	GW	↓	6:55am	↓	↓	↓	↓	↓	↓	X								3	6			2			
79768	GP-39 GW	↓	↓	9:44am	↓	↓	↓	↓	↓	↓	X								3	6			2			
79769	GP-44 GW	↓	↓	10:59am	↓	↓	↓	↓	↓	↓	X								3	6			2			
79770	TB-9	GW	↓	—	↓														2							

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5-2-12	11:50
[signature]	[signature]	5/2/12	12:30

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Thursday, May 10, 2012

Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB79026 - BB79039

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	14:05
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79026

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-44 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	05/06/12		LK	6010
Arsenic	1.91	0.66	mg/Kg	05/06/12		LK	6010
Barium	20.5	0.33	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.33	0.33	mg/Kg	05/06/12		LK	6010
Chromium	6.16	0.33	mg/Kg	05/06/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	05/02/12		RS	SW-7471
Lead	24.4	0.33	mg/Kg	05/06/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	05/08/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.009	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.057	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.172	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	96		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-44 10-12 FT

Phoenix I.D.: BB79026

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	108		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	92		%	05/02/12		MH	30 - 150 %
% TCMX	86		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	33	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	51	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	33	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.1	ug/Kg	05/03/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-44 10-12 FT

Phoenix I.D.: BB79026

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	91		%	05/03/12		KCA	30 - 150 %
% TCMX	90		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/01/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/01/12		H/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/01/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/01/12		H/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Benzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromoform	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromomethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloroform	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/01/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dibromomethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Ethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Hexachlorobutadiene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Isopropylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
m&p-Xylene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/01/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/01/12		H/J	SW8260
Methylene chloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Naphthalene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
n-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
n-Propylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
o-Xylene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
p-Isopropyltoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
sec-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Styrene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
tert-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Tetrachloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/01/12		H/J	SW8260
Toluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Total Xylenes	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/01/12		H/J	SW8260
Trichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Trichlorofluoromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Vinyl chloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/01/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	05/01/12		H/J	70 - 130 %
% Dibromofluoromethane	106		%	05/01/12		H/J	70 - 130 %
% Toluene-d8	95		%	05/01/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-44 10-12 FT

Phoenix I.D.: BB79026

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/02/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/02/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Aniline	ND	990	ug/Kg	05/02/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/02/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	05/02/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	05/02/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/02/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-44 10-12 FT

Phoenix I.D.: BB79026

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/02/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	05/02/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	86		%	05/02/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	05/02/12		DD	15 - 130 %
% 2-Fluorophenol	96		%	05/02/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	05/02/12		DD	15 - 130 %
% Phenol-d5	89		%	05/02/12		DD	15 - 130 %
% Terphenyl-d14	75		%	05/02/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	13:35
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79027

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-45 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	05/06/12		LK	6010
Arsenic	2.63	0.74	mg/Kg	05/06/12		LK	6010
Barium	21.4	0.37	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.37	0.37	mg/Kg	05/06/12		LK	6010
Chromium	8.27	0.37	mg/Kg	05/06/12		LK	6010
Mercury	< 0.06	0.06	mg/Kg	05/02/12		RS	SW-7471
Lead	43.5	0.37	mg/Kg	05/06/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/08/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.036	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	0.0005	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.144	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	96		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-45 10-12 FT

Phoenix I.D.: BB79027

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	59		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	89		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	90		%	05/02/12		MH	30 - 150 %
% TCMX	95		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	33	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	51	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	33	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.1	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	84		%	05/03/12		KCA	30 - 150 %
% TCMX	84		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,1,1-Trichloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	2.3	ug/Kg	05/01/12		H/J	SW8260
1,1,2-Trichloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloropropene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichloropropane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloropropane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichloropropane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
1,4-Dichlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
2,2-Dichloropropane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
2-Chlorotoluene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
2-Hexanone	ND	20	ug/Kg	05/01/12		H/J	SW8260
2-Isopropyltoluene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
4-Chlorotoluene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
4-Methyl-2-pentanone	ND	20	ug/Kg	05/01/12		H/J	SW8260
Acetone	ND	78	ug/Kg	05/01/12		H/J	SW8260
Acrylonitrile	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Benzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Bromobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Bromochloromethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Bromodichloromethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Bromoform	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Bromomethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Carbon Disulfide	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Carbon tetrachloride	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Chlorobenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Chloroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Chloroform	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Chloromethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Dibromochloromethane	ND	2.3	ug/Kg	05/01/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-45 10-12 FT

Phoenix I.D.: BB79027

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Dibromomethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Dichlorodifluoromethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Ethylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Hexachlorobutadiene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Isopropylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
m&p-Xylene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Methyl Ethyl Ketone	ND	23	ug/Kg	05/01/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	7.8	ug/Kg	05/01/12		H/J	SW8260
Methylene chloride	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Naphthalene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
n-Butylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
n-Propylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
o-Xylene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
p-Isopropyltoluene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
sec-Butylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Styrene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
tert-Butylbenzene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Tetrachloroethene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	7.8	ug/Kg	05/01/12		H/J	SW8260
Toluene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Total Xylenes	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	7.8	ug/Kg	05/01/12		H/J	SW8260
Trichloroethene	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Trichlorofluoromethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Trichlorotrifluoroethane	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
Vinyl chloride	ND	3.9	ug/Kg	05/01/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	05/01/12		H/J	70 - 130 %
% Bromofluorobenzene	95		%	05/01/12		H/J	70 - 130 %
% Dibromofluoromethane	78		%	05/01/12		H/J	70 - 130 %
% Toluene-d8	97		%	05/01/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-45 10-12 FT

Phoenix I.D.: BB79027

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/02/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/02/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Aniline	ND	990	ug/Kg	05/02/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/02/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	05/02/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	05/02/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/02/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-45 10-12 FT

Phoenix I.D.: BB79027

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/02/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	05/02/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	05/02/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/02/12		DD	15 - 130 %
% 2-Fluorophenol	93		%	05/02/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	05/02/12		DD	15 - 130 %
% Phenol-d5	87		%	05/02/12		DD	15 - 130 %
% Terphenyl-d14	90		%	05/02/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	12:58
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79028

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-46 10-12 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	05/06/12		LK	6010
Arsenic	2.39	0.73	mg/Kg	05/06/12		LK	6010
Barium	13.8	0.37	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.37	0.37	mg/Kg	05/06/12		LK	6010
Chromium	5.68	0.37	mg/Kg	05/06/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	11.1	0.37	mg/Kg	05/06/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/08/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/04/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/04/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/04/12		EK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	96		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-46 10-12 FT

Phoenix I.D.: BB79028

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	96		%	05/02/12		MH	30 - 150 %
% TCMX	97		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	33	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	33	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	16	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	51	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	16	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.1	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	16	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	33	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	33	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.1	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	16	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	160	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	160	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	83		%	05/03/12		KCA	30 - 150 %
% TCMX	89		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/01/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/01/12		H/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/01/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/01/12		H/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Benzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromoform	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Bromomethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloroform	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Chloromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/01/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dibromomethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Ethylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Hexachlorobutadiene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Isopropylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
m&p-Xylene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/01/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/01/12		H/J	SW8260
Methylene chloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Naphthalene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
n-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
n-Propylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
o-Xylene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
p-Isopropyltoluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
sec-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Styrene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
tert-Butylbenzene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Tetrachloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/01/12		H/J	SW8260
Toluene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Total Xylenes	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/01/12		H/J	SW8260
Trichloroethene	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Trichlorofluoromethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
Vinyl chloride	ND	5.3	ug/Kg	05/01/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/01/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	05/01/12		H/J	70 - 130 %
% Dibromofluoromethane	118		%	05/01/12		H/J	70 - 130 %
% Toluene-d8	95		%	05/01/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	05/02/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-46 10-12 FT

Phoenix I.D.: BB79028

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	05/02/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	05/02/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	05/02/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	05/02/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	05/02/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Aniline	ND	990	ug/Kg	05/02/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	05/02/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	05/02/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	05/02/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	05/02/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	05/02/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	05/02/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	05/02/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-46 10-12 FT

Phoenix I.D.: BB79028

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	05/02/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	05/02/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Phenol	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	05/02/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	05/02/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	76		%	05/02/12		DD	15 - 130 %
% 2-Fluorobiphenyl	68		%	05/02/12		DD	15 - 130 %
% 2-Fluorophenol	81		%	05/02/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	05/02/12		DD	15 - 130 %
% Phenol-d5	77		%	05/02/12		DD	15 - 130 %
% Terphenyl-d14	80		%	05/02/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	12:30
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79029

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-47 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	05/08/12		EK	6010
Arsenic	30.1	0.81	mg/Kg	05/08/12		EK	6010
Barium	90.0	0.41	mg/Kg	05/06/12		LK	6010
Cadmium	1.15	0.41	mg/Kg	05/08/12		EK	6010
Chromium	98.8	0.41	mg/Kg	05/06/12		LK	6010
Mercury	0.38	0.09	mg/Kg	05/02/12		RS	SW-7471
Lead	10100	41	mg/Kg	05/08/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.005	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.024	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.021	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.886	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	88		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-47 2-4 FT

Phoenix I.D.: BB79029

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	94	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	94	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	58		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	560	22	mg/Kg	05/03/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/03/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	99		%	05/03/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	700	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	87		%	05/02/12		MH	30 - 150 %
% TCMX	110		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	78		%	05/03/12		KCA	30 - 150 %
% TCMX	70		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	120	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-47 2-4 FT

Phoenix I.D.: BB79029

Parameter	Result	RL	Units	Date	Time	By	Reference	
Dibromoethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Dibromomethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Dichlorodifluoromethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Ethylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Hexachlorobutadiene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Isopropylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
m&p-Xylene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Methyl Ethyl Ketone	ND	35	ug/Kg	05/03/12		R/J	SW8260	
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/03/12		R/J	SW8260	
Methylene chloride	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Naphthalene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
n-Butylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
n-Propylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
o-Xylene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
p-Isopropyltoluene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
sec-Butylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Styrene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
tert-Butylbenzene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Tetrachloroethene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/03/12		R/J	SW8260	
Toluene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Total Xylenes	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/03/12		R/J	SW8260	
Trichloroethene	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Trichlorofluoromethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Trichlorotrifluoroethane	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
Vinyl chloride	ND	5.9	ug/Kg	05/03/12		R/J	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	110		%	05/03/12		R/J	70 - 130 %	
% Bromofluorobenzene	69		%	05/03/12		R/J	70 - 130 %	3
% Dibromofluoromethane	102		%	05/03/12		R/J	70 - 130 %	
% Toluene-d8	94		%	05/03/12		R/J	70 - 130 %	
Semivolatiles								
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
1,2,4-Trichlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
1,2-Dichlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
1,3-Dichlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
1,4-Dichlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,4,5-Trichlorophenol	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,4,6-Trichlorophenol	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,4-Dichlorophenol	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,4-Dimethylphenol	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,4-Dinitrophenol	ND	1200	ug/Kg	05/02/12		DD	SW 8270	
2,4-Dinitrotoluene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2,6-Dinitrotoluene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2-Chloronaphthalene	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2-Chlorophenol	ND	520	ug/Kg	05/02/12		DD	SW 8270	
2-Methylnaphthalene	1100	520	ug/Kg	05/02/12		DD	SW 8270	

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-47 2-4 FT

Phoenix I.D.: BB79029

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	520	ug/Kg	05/02/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/02/12		DD	SW 8270
2-Nitrophenol	ND	520	ug/Kg	05/02/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	750	ug/Kg	05/02/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	520	ug/Kg	05/02/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/02/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	05/02/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	750	ug/Kg	05/02/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	520	ug/Kg	05/02/12		DD	SW 8270
4-Chloroaniline	ND	520	ug/Kg	05/02/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	05/02/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/02/12		DD	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	05/02/12		DD	SW 8270
Acenaphthene	ND	520	ug/Kg	05/02/12		DD	SW 8270
Acenaphthylene	2500	520	ug/Kg	05/02/12		DD	SW 8270
Acetophenone	ND	520	ug/Kg	05/02/12		DD	SW 8270
Aniline	ND	2200	ug/Kg	05/02/12		DD	SW 8270
Anthracene	1800	520	ug/Kg	05/02/12		DD	SW 8270
Azobenzene	ND	750	ug/Kg	05/02/12		DD	SW 8270
Benz(a)anthracene	6300	520	ug/Kg	05/02/12		DD	SW 8270
Benzidine	ND	900	ug/Kg	05/02/12		DD	SW 8270
Benzo(a)pyrene	6400	520	ug/Kg	05/02/12		DD	SW 8270
Benzo(b)fluoranthene	22000	520	ug/Kg	05/02/12		DD	SW 8270
Benzo(ghi)perylene	3000	520	ug/Kg	05/02/12		DD	SW 8270
Benzo(k)fluoranthene	5100	520	ug/Kg	05/02/12		DD	SW 8270
Benzoic acid	ND	2200	ug/Kg	05/02/12		DD	SW 8270
Benzyl butyl phthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	750	ug/Kg	05/02/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	05/02/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Carbazole	1200	1100	ug/Kg	05/02/12		DD	SW 8270
Chrysene	6800	520	ug/Kg	05/02/12		DD	SW 8270
Dibenz(a,h)anthracene	970	520	ug/Kg	05/02/12		DD	SW 8270
Dibenzofuran	1000	520	ug/Kg	05/02/12		DD	SW 8270
Diethyl phthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Dimethylphthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Di-n-butylphthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Di-n-octylphthalate	ND	520	ug/Kg	05/02/12		DD	SW 8270
Fluoranthene	12000	520	ug/Kg	05/02/12		DD	SW 8270
Fluorene	ND	520	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270
Hexachlorobutadiene	ND	520	ug/Kg	05/02/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	520	ug/Kg	05/02/12		DD	SW 8270
Hexachloroethane	ND	520	ug/Kg	05/02/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	3100	520	ug/Kg	05/02/12		DD	SW 8270
Isophorone	ND	520	ug/Kg	05/02/12		DD	SW 8270
Naphthalene	1100	520	ug/Kg	05/02/12		DD	SW 8270
Nitrobenzene	ND	520	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodimethylamine	ND	750	ug/Kg	05/02/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-47 2-4 FT

Phoenix I.D.: BB79029

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	520	ug/Kg	05/02/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	750	ug/Kg	05/02/12		DD	SW 8270
Pentachloronitrobenzene	ND	750	ug/Kg	05/02/12		DD	SW 8270
Pentachlorophenol	ND	750	ug/Kg	05/02/12		DD	SW 8270
Phenanthrene	4300	520	ug/Kg	05/02/12		DD	SW 8270
Phenol	ND	520	ug/Kg	05/02/12		DD	SW 8270
Pyrene	9300	520	ug/Kg	05/02/12		DD	SW 8270
Pyridine	ND	750	ug/Kg	05/02/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	05/02/12		DD	15 - 130 %
% 2-Fluorobiphenyl	77		%	05/02/12		DD	15 - 130 %
% 2-Fluorophenol	83		%	05/02/12		DD	15 - 130 %
% Nitrobenzene-d5	86		%	05/02/12		DD	15 - 130 %
% Phenol-d5	85		%	05/02/12		DD	15 - 130 %
% Terphenyl-d14	88		%	05/02/12		DD	15 - 130 %

3 = This parameter exceeds laboratory specified limits.

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	11:51
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79030

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-48 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	05/06/12		LK	6010
Arsenic	12.3	0.80	mg/Kg	05/06/12		LK	6010
Barium	56.0	0.40	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.40	0.40	mg/Kg	05/08/12		EK	6010
Chromium	34.7	0.40	mg/Kg	05/06/12		LK	6010
Mercury	0.15	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	213	4.0	mg/Kg	05/08/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.030	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.170	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.043	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	0.0008	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.706	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	89		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-48 2-4 FT

Phoenix I.D.: BB79030

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	93	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	93	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	310	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	125		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	85		%	05/02/12		MH	30 - 150 %
% TCMX	75		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	83		%	05/03/12		KCA	30 - 150 %
% TCMX	78		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-48 2-4 FT

Phoenix I.D.: BB79030

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	110		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	72		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	97		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	96		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-48 2-4 FT

Phoenix I.D.: BB79030

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	730	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	730	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	880	510	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	710	510	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	730	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	3200	510	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	880	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	3000	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	5300	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	1800	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	1900	510	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	730	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Chrysene	3600	510	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	600	510	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	5100	510	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1800	510	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	730	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-48 2-4 FT

Phoenix I.D.: BB79030

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	730	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	730	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	730	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	1300	510	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
Pyrene	4400	510	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	730	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	115		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	83		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	102		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	90		%	05/01/12		DD	15 - 130 %
% Phenol-d5	94		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	87		%	05/01/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	11:24
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79031

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-49 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 2.0	2.0	mg/Kg	05/08/12		LK	6010
Arsenic	21.1	0.79	mg/Kg	05/08/12		LK	6010
Barium	112	0.40	mg/Kg	05/06/12		LK	6010
Cadmium	< 0.40	0.40	mg/Kg	05/08/12		EK	6010
Chromium	29.9	0.40	mg/Kg	05/06/12		LK	6010
Mercury	0.37	0.06	mg/Kg	05/02/12		RS	SW-7471
Lead	850	4.0	mg/Kg	05/08/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	05/09/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.023	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.099	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.026	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	0.0011	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	1.45	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	90		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-49 2-4 FT

Phoenix I.D.: BB79031

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	63		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	180	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	105		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	95		%	05/02/12		MH	30 - 150 %
% TCMX	67		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	85		%	05/03/12		KCA	30 - 150 %
% TCMX	84		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-49 2-4 FT

Phoenix I.D.: BB79031

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	86		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	96		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	101		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-49 2-4 FT

Phoenix I.D.: BB79031

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	510	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	730	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	510	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	730	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	510	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	510	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	730	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	1400	510	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	880	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	1300	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	2800	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	770	510	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	620	510	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	730	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	510	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Chrysene	1900	510	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	ND	510	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	510	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	2600	510	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	510	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	760	510	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	510	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	ND	510	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	510	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	730	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-49 2-4 FT

Phoenix I.D.: BB79031

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	510	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	730	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	730	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	730	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	1800	510	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	510	ug/Kg	05/01/12		DD	SW 8270
Pyrene	2000	510	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	730	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	78		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	80		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	87		%	05/01/12		DD	15 - 130 %
% Phenol-d5	80		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	80		%	05/01/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	10:51
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79032

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-50 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	05/08/12		LK	6010
Arsenic	19.1	0.72	mg/Kg	05/08/12		LK	6010
Barium	95.4	0.36	mg/Kg	05/03/12		EK	6010
Cadmium	1.25	0.36	mg/Kg	05/08/12		LK	6010
Chromium	45.2	0.36	mg/Kg	05/03/12		EK	6010
Mercury	0.75	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	1230	3.6	mg/Kg	05/08/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.021	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.096	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.039	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	0.0006	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	1.67	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	85		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-50 2-4 FT

Phoenix I.D.: BB79032

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	63		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	600	23	mg/Kg	05/03/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/03/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	112		%	05/03/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	640	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	103		%	05/02/12		MH	30 - 150 %
% TCMX	76		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	37	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	37	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.8	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	58	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.8	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	37	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	37	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	37	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	37	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	37	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.8	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	87		%	05/03/12		KCA	30 - 150 %
% TCMX	72		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	05/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloropropene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloropropane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichloropropane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
2,2-Dichloropropane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
2-Chlorotoluene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
2-Hexanone	ND	30	ug/Kg	05/02/12		H/J	SW8260
2-Isopropyltoluene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
4-Chlorotoluene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	05/02/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/02/12		H/J	SW8260
Acrylonitrile	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Benzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Bromobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Bromochloromethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Bromodichloromethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Bromoform	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Bromomethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Carbon Disulfide	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Carbon tetrachloride	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Chlorobenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Chloroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Chloroform	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Chloromethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Dibromochloromethane	ND	3.6	ug/Kg	05/02/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Dibromomethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Ethylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Hexachlorobutadiene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Isopropylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
m&p-Xylene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	36	ug/Kg	05/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/02/12		H/J	SW8260
Methylene chloride	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Naphthalene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
n-Butylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
n-Propylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
o-Xylene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
p-Isopropyltoluene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
sec-Butylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Styrene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
tert-Butylbenzene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Tetrachloroethene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/02/12		H/J	SW8260
Toluene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Total Xylenes	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/02/12		H/J	SW8260
Trichloroethene	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Trichlorofluoromethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
Vinyl chloride	ND	6.0	ug/Kg	05/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/02/12		H/J	70 - 130 %
% Bromofluorobenzene	95		%	05/02/12		H/J	70 - 130 %
% Dibromofluoromethane	105		%	05/02/12		H/J	70 - 130 %
% Toluene-d8	95		%	05/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	540	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	540	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	540	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	620	540	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-50 2-4 FT

Phoenix I.D.: BB79032

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	540	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	760	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	540	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2200	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	760	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	540	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	540	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	2200	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	540	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	930	540	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	540	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	2200	ug/Kg	05/01/12		DD	SW 8270
Anthracene	1300	540	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	760	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	3500	540	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	920	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	3100	540	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	6700	540	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	1600	540	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	1400	540	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	2200	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	540	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	540	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	760	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	540	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	1800	540	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Chrysene	4600	540	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	620	540	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	ND	540	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	540	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	540	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	540	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	540	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	5100	540	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	540	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	540	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	540	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	540	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1800	540	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	540	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	600	540	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	540	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	760	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-50 2-4 FT

Phoenix I.D.: BB79032

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	540	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	760	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	760	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	760	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	2000	540	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	540	ug/Kg	05/01/12		DD	SW 8270
Pyrene	4300	540	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	760	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	90		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	63		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	68		%	05/01/12		DD	15 - 130 %
% Phenol-d5	70		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	67		%	05/01/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	10:19
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79033

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-51 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	05/08/12		LK	6010
Arsenic	26.7	0.75	mg/Kg	05/08/12		LK	6010
Barium	179	0.38	mg/Kg	05/03/12		EK	6010
Cadmium	2.91	0.38	mg/Kg	05/08/12		LK	6010
Chromium	36.2	0.38	mg/Kg	05/03/12		EK	6010
Mercury	12.4	0.87	mg/Kg	05/02/12		RS	SW-7471
Lead	1140	3.8	mg/Kg	05/08/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.008	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.046	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.011	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	0.0062	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.357	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	84		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-51 1-3 FT

Phoenix I.D.: BB79033

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	61		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	300	12	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	109		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	72		%	05/02/12		MH	30 - 150 %
% TCMX	46		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	38	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	38	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	67		%	05/03/12		KCA	30 - 150 %
% TCMX	58		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	170	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	290	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	290	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	290	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	1400	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	290	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	290	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	1400	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	5800	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	290	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	290	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	290	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	290	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	290	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	290	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	170	ug/Kg	05/03/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-51 1-3 FT

Phoenix I.D.: BB79033

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Dibromomethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Dichlorodifluoromethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Ethylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Hexachlorobutadiene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Isopropylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
m&p-Xylene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Methyl Ethyl Ketone	ND	1700	ug/Kg	05/03/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	580	ug/Kg	05/03/12		R/J	SW8260
Methylene chloride	ND	290	ug/Kg	05/03/12		R/J	SW8260
Naphthalene	ND	290	ug/Kg	05/03/12		R/J	SW8260
n-Butylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
n-Propylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
o-Xylene	ND	290	ug/Kg	05/03/12		R/J	SW8260
p-Isopropyltoluene	ND	290	ug/Kg	05/03/12		R/J	SW8260
sec-Butylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Styrene	ND	290	ug/Kg	05/03/12		R/J	SW8260
tert-Butylbenzene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Tetrachloroethene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	580	ug/Kg	05/03/12		R/J	SW8260
Toluene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Total Xylenes	ND	290	ug/Kg	05/03/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	290	ug/Kg	05/03/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	290	ug/Kg	05/03/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	580	ug/Kg	05/03/12		R/J	SW8260
Trichloroethene	ND	290	ug/Kg	05/03/12		R/J	SW8260
Trichlorofluoromethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Trichlorotrifluoroethane	ND	290	ug/Kg	05/03/12		R/J	SW8260
Vinyl chloride	ND	290	ug/Kg	05/03/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/03/12		R/J	70 - 130 %
% Bromofluorobenzene	89		%	05/03/12		R/J	70 - 130 %
% Dibromofluoromethane	92		%	05/03/12		R/J	70 - 130 %
% Toluene-d8	103		%	05/03/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	1100	270	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-51 1-3 FT

Phoenix I.D.: BB79033

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	620	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	620	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	270	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	620	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	270	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	530	270	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	390	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	1600	270	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	470	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	1600	270	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	2800	270	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	1200	270	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	950	270	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	580	ug/Kg	05/01/12		DD	SW 8270
Chrysene	2000	270	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	410	270	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	470	270	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	3000	270	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	270	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1100	270	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	270	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	850	270	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	270	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-51 1-3 FT

Phoenix I.D.: BB79033

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	390	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	2400	270	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	270	ug/Kg	05/01/12		DD	SW 8270
Pyrene	2600	270	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	390	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	106		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	80		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	90		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	91		%	05/01/12		DD	15 - 130 %
% Phenol-d5	91		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	91		%	05/01/12		DD	15 - 130 %

Comments:

Elevated reporting limits for volatiles due to dilution for sample matrix. Low-level samples were analyzed with poor internal standard response.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	9:58
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79034

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-52 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	05/03/12		EK	6010
Arsenic	31.9	7.3	mg/Kg	05/08/12		LK	6010
Barium	79.6	0.37	mg/Kg	05/03/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	05/03/12		EK	6010
Chromium	35.8	0.37	mg/Kg	05/03/12		EK	6010
Mercury	2.98	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	513	3.7	mg/Kg	05/08/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.018	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.045	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.013	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.352	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	91		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-52 2-4 FT

Phoenix I.D.: BB79034

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	45	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	45	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	45	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	450	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	45	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	90	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	45	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	90	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	57		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	110	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	119		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	86		%	05/02/12		MH	30 - 150 %
% TCMX	59		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	104		%	05/03/12		KCA	30 - 150 %
% TCMX	76		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/03/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/03/12		R/J	SW8260
Acetone	ND	110	ug/Kg	05/03/12		R/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Benzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Bromoform	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Bromomethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Chloroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Chloroform	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Chloromethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/03/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference	
Dibromoethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Dibromomethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Dichlorodifluoromethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Ethylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Hexachlorobutadiene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Isopropylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
m&p-Xylene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Methyl Ethyl Ketone	ND	32	ug/Kg	05/03/12		R/J	SW8260	
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/03/12		R/J	SW8260	
Methylene chloride	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Naphthalene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
n-Butylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
n-Propylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
o-Xylene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
p-Isopropyltoluene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
sec-Butylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Styrene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
tert-Butylbenzene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Tetrachloroethene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/03/12		R/J	SW8260	
Toluene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Total Xylenes	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/03/12		R/J	SW8260	
Trichloroethene	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Trichlorofluoromethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Trichlorotrifluoroethane	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
Vinyl chloride	ND	5.3	ug/Kg	05/03/12		R/J	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	126		%	05/03/12		R/J	70 - 130 %	
% Bromofluorobenzene	63		%	05/03/12		R/J	70 - 130 %	3
% Dibromofluoromethane	99		%	05/03/12		R/J	70 - 130 %	
% Toluene-d8	93		%	05/03/12		R/J	70 - 130 %	
Semivolatiles								
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
1,2-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
1,3-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
1,4-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,4-Dichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,4-Dimethylphenol	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,4-Dinitrophenol	ND	580	ug/Kg	05/01/12		DD	SW 8270	
2,4-Dinitrotoluene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2,6-Dinitrotoluene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2-Chloronaphthalene	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2-Chlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270	
2-Methylnaphthalene	620	250	ug/Kg	05/01/12		DD	SW 8270	

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-52 2-4 FT

Phoenix I.D.: BB79034

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	360	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	320	250	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	320	250	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	360	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	1100	250	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	1000	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	2200	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	640	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	530	250	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	360	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	05/01/12		DD	SW 8270
Chrysene	1400	250	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	310	250	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	1700	250	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	660	250	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	570	250	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	360	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-52 2-4 FT

Phoenix I.D.: BB79034

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	360	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	360	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	360	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	1100	250	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
Pyrene	1400	250	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	360	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	94		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	85		%	05/01/12		DD	15 - 130 %
% Phenol-d5	92		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	79		%	05/01/12		DD	15 - 130 %

3 = This parameter exceeds laboratory specified limits.

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

**Poor IS recovery was observed for volatiles due to matrix interference. Sample was analyzed twice with similar results.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	9:37
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79035

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-53 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	05/08/12		LK	6010
Arsenic	20.5	0.76	mg/Kg	05/08/12		LK	6010
Barium	60.6	0.38	mg/Kg	05/03/12		EK	6010
Cadmium	< 0.38	0.38	mg/Kg	05/03/12		EK	6010
Chromium	28.6	0.38	mg/Kg	05/03/12		EK	6010
Mercury	< 0.08	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	490	3.8	mg/Kg	05/08/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.028	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.090	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	0.027	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.962	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	89		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-53 2-4 FT

Phoenix I.D.: BB79035

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	94	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	94	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	59		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	240	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	136		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	93		%	05/02/12		MH	30 - 150 %
% TCMX	62		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	87		%	05/03/12		KCA	30 - 150 %
% TCMX	81		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	05/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	05/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	05/02/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/02/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Chloromethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	05/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-53 2-4 FT

Phoenix I.D.: BB79035

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
m&p-Xylene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	05/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/02/12		H/J	SW8260
Methylene chloride	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/02/12		H/J	SW8260
Toluene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Total Xylenes	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/02/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	05/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/02/12		H/J	70 - 130 %
% Bromofluorobenzene	92		%	05/02/12		H/J	70 - 130 %
% Dibromofluoromethane	79		%	05/02/12		H/J	70 - 130 %
% Toluene-d8	98		%	05/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	590	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	780	260	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-53 2-4 FT

Phoenix I.D.: BB79035

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	590	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	590	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	590	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	390	260	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	260	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	350	260	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	370	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	1300	260	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	1200	260	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	2400	260	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	670	260	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	580	260	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	05/01/12		DD	SW 8270
Chrysene	1500	260	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	420	260	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	1700	260	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	670	260	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	260	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	490	260	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-53 2-4 FT

Phoenix I.D.: BB79035

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	1400	260	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	260	ug/Kg	05/01/12		DD	SW 8270
Pyrene	1500	260	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	370	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	79		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	05/01/12		DD	15 - 130 %
% Phenol-d5	78		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	77		%	05/01/12		DD	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	9:04
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79036

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-54 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	05/08/12		LK	6010
Arsenic	20.5	0.74	mg/Kg	05/08/12		LK	6010
Barium	70.4	0.37	mg/Kg	05/03/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	05/03/12		EK	6010
Chromium	39.8	0.37	mg/Kg	05/03/12		EK	6010
Mercury	0.11	0.07	mg/Kg	05/02/12		RS	SW-7471
Lead	606	3.7	mg/Kg	05/08/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	0.007	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.031	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.154	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	89		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-54 2-4 FT

Phoenix I.D.: BB79036

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	47	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	470	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	94	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	47	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	94	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	180	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	149		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	75		%	05/02/12		MH	30 - 150 %
% TCMX	72		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	36	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	36	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	56	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.6	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	36	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	36	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.6	ug/Kg	05/03/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	77		%	05/03/12		KCA	30 - 150 %
% TCMX	66		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	05/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	05/02/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/02/12		H/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Benzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Bromoform	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Bromomethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Chloroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Chloroform	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Chloromethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-54 2-4 FT

Phoenix I.D.: BB79036

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
m&p-Xylene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/02/12		H/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Naphthalene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
o-Xylene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Styrene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/02/12		H/J	SW8260
Toluene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Total Xylenes	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/02/12		H/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	05/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	05/02/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	05/02/12		H/J	70 - 130 %
% Dibromofluoromethane	110		%	05/02/12		H/J	70 - 130 %
% Toluene-d8	94		%	05/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	580	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	740	250	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-54 2-4 FT

Phoenix I.D.: BB79036

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	360	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	580	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	330	250	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	300	250	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	360	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	980	250	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	920	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	1900	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	660	250	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	440	250	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	360	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	540	ug/Kg	05/01/12		DD	SW 8270
Chrysene	1200	250	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	410	250	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	1400	250	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	640	250	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	660	250	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	360	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-54 2-4 FT

Phoenix I.D.: BB79036

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	360	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	360	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	360	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	1500	250	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	250	ug/Kg	05/01/12		DD	SW 8270
Pyrene	1200	250	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	360	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	99		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	81		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	05/01/12		DD	15 - 130 %
% Phenol-d5	84		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	78		%	05/01/12		DD	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	8:47
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79037

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-55 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 2.0	2.0	mg/Kg	05/08/12		LK	6010
Arsenic	15.2	0.67	mg/Kg	05/08/12		LK	6010
Barium	86.6	0.33	mg/Kg	05/03/12		EK	6010
Cadmium	0.56	0.33	mg/Kg	05/08/12		LK	6010
Chromium	22.2	0.33	mg/Kg	05/03/12		EK	6010
Mercury	0.13	0.08	mg/Kg	05/02/12		RS	SW-7471
Lead	692	3.3	mg/Kg	05/08/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	05/03/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/05/12		LK	6010
SPLP Barium	0.021	0.010	mg/L	05/05/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/05/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/05/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/02/12		RS	1312/SW7470
SPLP Lead	0.099	0.010	mg/L	05/05/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/05/12		LK	6010
Total Metals Digest	Completed			05/01/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/02/12		X/X	SW846-3005
Percent Solid	90		%	05/01/12		JL	E160.3
Soil Extraction for PCB	Completed			05/01/12		BB	SW3545
Soil Extraction for Pesticide	Completed			05/01/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			05/01/12		BB/R	SW3545
Extraction of CT ETPH	Completed			05/01/12		RS/F	3545
Mercury Digestion	Completed			05/02/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/01/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/02/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/01/12		X	EPA 1312
Field Extraction	Completed			04/30/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-55 2-4 FT

Phoenix I.D.: BB79037

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/02/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/02/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/02/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/02/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	05/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	150	11	mg/Kg	05/02/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/02/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	05/02/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/02/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/02/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	48		%	05/02/12		MH	30 - 150 %
% TCMX	46		%	05/02/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	05/03/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	05/03/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	05/03/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	05/03/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	05/03/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	05/03/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	05/03/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	05/03/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	05/03/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	05/03/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	05/03/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-55 2-4 FT

Phoenix I.D.: BB79037

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	05/03/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	05/03/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	05/03/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	05/03/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	46		%	05/03/12		KCA	30 - 150 %
% TCMX	41		%	05/03/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	05/03/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	05/03/12		H/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	05/03/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/03/12		H/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Benzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Bromoform	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Bromomethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Chloroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Chloroform	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Chloromethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	05/03/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-55 2-4 FT

Phoenix I.D.: BB79037

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
m&p-Xylene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	05/03/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/03/12		H/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Naphthalene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
o-Xylene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Styrene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/03/12		H/J	SW8260
Toluene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Total Xylenes	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/03/12		H/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	05/03/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	05/03/12		H/J	70 - 130 %
% Bromofluorobenzene	88		%	05/03/12		H/J	70 - 130 %
% Dibromofluoromethane	84		%	05/03/12		H/J	70 - 130 %
% Toluene-d8	105		%	05/03/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
1,2-Dichlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
1,3-Dichlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
1,4-Dichlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,4-Dichlorophenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,4-Dimethylphenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrophenol	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2,4-Dinitrotoluene	ND	520	ug/Kg	05/01/12		DD	SW 8270
2,6-Dinitrotoluene	ND	520	ug/Kg	05/01/12		DD	SW 8270
2-Chloronaphthalene	ND	520	ug/Kg	05/01/12		DD	SW 8270
2-Chlorophenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
2-Methylnaphthalene	ND	520	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-55 2-4 FT

Phoenix I.D.: BB79037

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	520	ug/Kg	05/01/12		DD	SW 8270
2-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
2-Nitrophenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	05/01/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	520	ug/Kg	05/01/12		DD	SW 8270
3-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	740	ug/Kg	05/01/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
4-Chloroaniline	ND	520	ug/Kg	05/01/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	05/01/12		DD	SW 8270
4-Nitroaniline	ND	1200	ug/Kg	05/01/12		DD	SW 8270
4-Nitrophenol	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Acenaphthene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Acenaphthylene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Acetophenone	ND	520	ug/Kg	05/01/12		DD	SW 8270
Aniline	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Anthracene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Azobenzene	ND	740	ug/Kg	05/01/12		DD	SW 8270
Benz(a)anthracene	840	520	ug/Kg	05/01/12		DD	SW 8270
Benzidine	ND	890	ug/Kg	05/01/12		DD	SW 8270
Benzo(a)pyrene	800	520	ug/Kg	05/01/12		DD	SW 8270
Benzo(b)fluoranthene	1700	520	ug/Kg	05/01/12		DD	SW 8270
Benzo(ghi)perylene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Benzo(k)fluoranthene	520	520	ug/Kg	05/01/12		DD	SW 8270
Benzoic acid	ND	2100	ug/Kg	05/01/12		DD	SW 8270
Benzyl butyl phthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	740	ug/Kg	05/01/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	05/01/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Carbazole	ND	1100	ug/Kg	05/01/12		DD	SW 8270
Chrysene	1200	520	ug/Kg	05/01/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Dibenzofuran	ND	520	ug/Kg	05/01/12		DD	SW 8270
Diethyl phthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Dimethylphthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Di-n-butylphthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Di-n-octylphthalate	ND	520	ug/Kg	05/01/12		DD	SW 8270
Fluoranthene	1300	520	ug/Kg	05/01/12		DD	SW 8270
Fluorene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Hexachlorobutadiene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Hexachloroethane	ND	520	ug/Kg	05/01/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Isophorone	ND	520	ug/Kg	05/01/12		DD	SW 8270
Naphthalene	ND	520	ug/Kg	05/01/12		DD	SW 8270
Nitrobenzene	ND	520	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodimethylamine	ND	740	ug/Kg	05/01/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-55 2-4 FT

Phoenix I.D.: BB79037

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	520	ug/Kg	05/01/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	740	ug/Kg	05/01/12		DD	SW 8270
Pentachloronitrobenzene	ND	740	ug/Kg	05/01/12		DD	SW 8270
Pentachlorophenol	ND	740	ug/Kg	05/01/12		DD	SW 8270
Phenanthrene	920	520	ug/Kg	05/01/12		DD	SW 8270
Phenol	ND	520	ug/Kg	05/01/12		DD	SW 8270
Pyrene	1100	520	ug/Kg	05/01/12		DD	SW 8270
Pyridine	ND	740	ug/Kg	05/01/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	84		%	05/01/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/01/12		DD	15 - 130 %
% 2-Fluorophenol	75		%	05/01/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	05/01/12		DD	15 - 130 %
% Phenol-d5	74		%	05/01/12		DD	15 - 130 %
% Terphenyl-d14	75		%	05/01/12		DD	15 - 130 %

Comments:

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	0:00
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79038

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-8 LL

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	05/02/12		SW	E160.3
Field Extraction	Completed			04/30/12		CK	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	05/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	05/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-8 LL

Phoenix I.D.: BB79038

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	05/02/12		H/J	SW8260
Acetone	ND	100	ug/Kg	05/02/12		H/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Benzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Bromoform	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Bromomethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Chloroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Chloroform	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Chloromethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	05/02/12		H/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	05/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	05/02/12		H/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Naphthalene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
o-Xylene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Styrene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	05/02/12		H/J	SW8260
Toluene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	05/02/12		H/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	05/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	05/02/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	05/02/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-8 LL

Phoenix I.D.: BB79038

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	77		%	05/02/12		H/J	70 - 130 %
% Toluene-d8	98		%	05/02/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED. %SOLIDS ASSUMED 100%

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

May 10, 2012

FOR: Attn: Ms Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		04/30/12	0:00
Location Code:	MAGU-DAS	Received by:	SW	05/01/12	13:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB79026
Phoenix ID: BB79039

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-8 HL

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	05/02/12		SW	E160.3
Field Extraction	Completed			04/30/12		CK	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloroethene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,1-Dichloropropene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,2-Dichloropropane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,3-Dichloropropane	ND	250	ug/Kg	05/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
2,2-Dichloropropane	ND	250	ug/Kg	05/02/12		H/J	SW8260
2-Chlorotoluene	ND	250	ug/Kg	05/02/12		H/J	SW8260
2-Hexanone	ND	1300	ug/Kg	05/02/12		H/J	SW8260
2-Isopropyltoluene	ND	250	ug/Kg	05/02/12		H/J	SW8260
4-Chlorotoluene	ND	250	ug/Kg	05/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-8 HL

Phoenix I.D.: BB79039

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	1300	ug/Kg	05/02/12		H/J	SW8260
Acetone	ND	5000	ug/Kg	05/02/12		H/J	SW8260
Acrylonitrile	ND	500	ug/Kg	05/02/12		H/J	SW8260
Benzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Bromobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Bromochloromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Bromodichloromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Bromoform	ND	250	ug/Kg	05/02/12		H/J	SW8260
Bromomethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Carbon Disulfide	ND	250	ug/Kg	05/02/12		H/J	SW8260
Carbon tetrachloride	ND	250	ug/Kg	05/02/12		H/J	SW8260
Chlorobenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Chloroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Chloroform	ND	250	ug/Kg	05/02/12		H/J	SW8260
Chloromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	250	ug/Kg	05/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Dibromochloromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Dibromoethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Dibromomethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Ethylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Hexachlorobutadiene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Isopropylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
m&p-Xylene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	3000	ug/Kg	05/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	05/02/12		H/J	SW8260
Methylene chloride	ND	500	ug/Kg	05/02/12		H/J	SW8260
Naphthalene	ND	250	ug/Kg	05/02/12		H/J	SW8260
n-Butylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
n-Propylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
o-Xylene	ND	250	ug/Kg	05/02/12		H/J	SW8260
p-Isopropyltoluene	ND	250	ug/Kg	05/02/12		H/J	SW8260
sec-Butylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Styrene	ND	250	ug/Kg	05/02/12		H/J	SW8260
tert-Butylbenzene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Tetrachloroethene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	500	ug/Kg	05/02/12		H/J	SW8260
Toluene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Total Xylenes	ND	250	ug/Kg	05/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	250	ug/Kg	05/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	250	ug/Kg	05/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	05/02/12		H/J	SW8260
Trichloroethene	ND	250	ug/Kg	05/02/12		H/J	SW8260
Trichlorofluoromethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	250	ug/Kg	05/02/12		H/J	SW8260
Vinyl chloride	ND	250	ug/Kg	05/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	05/02/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	05/02/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-8 HL

Phoenix I.D.: BB79039

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	100		%	05/02/12		H/J	70 - 130 %
% Toluene-d8	94		%	05/02/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED. %SOLIDS ASSUMED 100%

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

May 10, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 10, 2012

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199654, QC Sample No: BB77808 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)													
Mercury - Soil	BDL	<0.09	<0.09	NC	104	101	2.9	101	97.9	3.1	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 199626, QC Sample No: BB78787 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031)													
ICP Metals - Soil													
Arsenic	BDL	2.75	2.85	NC	99.1	94.3	5.0	95.1	95.2	0.1	75 - 125	30	
Barium	BDL	87.9	87.3	0.70	104	96.0	8.0	107	104	2.8	75 - 125	30	
Cadmium	BDL	<0.37	<0.37	NC	99.5	97.0	2.5	95.2	95.1	0.1	75 - 125	30	
Chromium	BDL	69.8	74.7	6.80	108	99.6	8.1	94.0	94.2	0.2	75 - 125	30	
Lead	BDL	0.00	9.07	NC	98.9	95.2	3.8	100	99.9	0.1	75 - 125	30	
Selenium	BDL	<0.37	<1.5	NC	92.2	84.8	8.4	68.3	68.1	0.3	75 - 125	30	m
Silver	BDL	<0.37	<0.37	NC	108	90.6	17.5	99.8	99.8	0.0	75 - 125	30	
QA/QC Batch 199655, QC Sample No: BB78970 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	105	100	4.9	96.8	99.7	3.0	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 199667, QC Sample No: BB79028 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	<0.004	<0.004	NC	100	102	2.0	102	101	1.0	75 - 125	20	
Barium	BDL	<0.010	<0.010	NC	98.0	99.2	1.2	100	99.6	0.4	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	102	103	1.0	102	101	1.0	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	100	102	2.0	102	101	1.0	75 - 125	20	
Lead	BDL	<0.010	<0.010	NC	101	102	1.0	102	101	1.0	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	101	103	2.0	103	102	1.0	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	93.1	94.8	1.8	95.5	94.8	0.7	75 - 125	20	
QA/QC Batch 199627, QC Sample No: BB79034 (BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)													
ICP Metals - Soil													
Arsenic	BDL	30.7	31.9	3.80	87.7	89.1	1.6	89.1	85.1	4.6	75 - 125	30	
Barium	BDL	79.6	74.0	7.30	94.9	96.1	1.3	91.6	78.1	15.9	75 - 125	30	
Cadmium	BDL	<0.37	<0.38	NC	96.8	90.7	6.5	90.6	89.2	1.6	75 - 125	30	
Chromium	BDL	35.8	31.0	14.4	101	101	0.0	95.6	92.9	2.9	75 - 125	30	
Lead	BDL	514	573	10.9	93.5	92.8	0.8	108	>130	NC	75 - 125	30	m
Selenium	BDL	<1.5	<1.5	NC	80.2	80.4	0.2	78.7	77.9	1.0	75 - 125	30	
Silver	BDL	<0.37	<0.38	NC	98.3	102	3.7	99.4	98.1	1.3	75 - 125	30	

m = This parameter is outside laboratory ms/msd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

May 10, 2012

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199245, QC Sample No: BB77192 (BB79027, BB79028, BB79029, BB79030, BB79031)										
Chlorinated Herbicides - Solid										
2,4,5-T	ND	102	96	6.1	87	122	33.5	40 - 140	30	r
2,4,5-TP (Silvex)	ND	98	94	4.2	94	104	10.1	40 - 140	30	
2,4-D	ND	114	111	2.7	127	114	10.8	40 - 140	30	
2,4-DB	ND	108	102	5.7	99	87	12.9	40 - 140	30	
Dalapon	ND	99	95	4.1	Intf	Intf	NC	40 - 140	30	
Dicamba	ND	101	98	3.0	99	107	7.8	40 - 140	30	
Dichloroprop	ND	99	94	5.2	99	108	8.7	40 - 140	30	
Dinoseb	ND	58	52	10.9	28	39	32.8	40 - 140	30	m,r
% DCAA (Surrogate Rec)	80	79	76	3.9	79	82	3.7	30 - 150	30	
QA/QC Batch 199550, QC Sample No: BB78695 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)										
TPH by GC (Extractable Products) - Solid										
Ext. Petroleum HC	ND	82			84	80	4.9	50 - 150	30	
% n-Pentacosane	73	112			119	113	5.2	50 - 150	30	
QA/QC Batch 199629, QC Sample No: BB79026 (BB79026, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)										
Chlorinated Herbicides - Solid										
2,4,5-T	ND	43	47	8.9	43	34	23.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	44	48	8.7	47	37	23.8	40 - 140	30	
2,4-D	ND	47	54	13.9	48	38	23.3	40 - 140	30	
2,4-DB	ND	43	51	17.0	36	28	25.0	40 - 140	30	m
Dalapon	ND	57	58	1.7	*	*	NC	40 - 140	30	
Dicamba	ND	48	51	6.1	48	41	15.7	40 - 140	30	
Dichloroprop	ND	37	42	12.7	41	35	15.8	40 - 140	30	l
Dinoseb	ND	20	32	46.2	26	4.3	143.2	40 - 140	30	l,m,r
% DCAA (Surrogate Rec)	64	74	79	6.5	74	60	20.9	30 - 150	30	

Comment:

* The MS/MSD recovery could not be determined for this compound due to the interference from a non-target peak.

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 199619, QC Sample No: BB79026 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)										
Pesticides - Solid										
4,4' -DDD	ND	73	80	9.2	76	79	3.9	40 - 140	30	
4,4' -DDE	ND	76	83	8.8	80	83	3.7	40 - 140	30	
4,4' -DDT	ND	70	80	13.3	72	76	5.4	40 - 140	30	
a-BHC	ND	81	89	9.4	85	89	4.6	40 - 140	30	
a-Chlordane	ND	79	88	10.8	84	88	4.7	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	79	85	7.3	83	86	3.6	40 - 140	30	
b-BHC	ND	75	82	8.9	80	81	1.2	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	79	87	9.6	83	87	4.7	40 - 140	30	

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Dieldrin	ND	81	89	9.4	85	89	4.6	40 - 140	30
Endosulfan I	ND	78	85	8.6	83	87	4.7	40 - 140	30
Endosulfan II	ND	70	78	10.8	80	84	4.9	40 - 140	30
Endosulfan sulfate	ND	69	81	16.0	79	82	3.7	40 - 140	30
Endrin	ND	75	83	10.1	80	83	3.7	40 - 140	30
Endrin aldehyde	ND	61	62	1.6	79	83	4.9	40 - 140	30
Endrin ketone	ND	76	85	11.2	81	84	3.6	40 - 140	30
g-BHC	ND	80	88	9.5	84	88	4.7	40 - 140	30
g-Chlordane	ND	80	87	8.4	84	88	4.7	40 - 140	30
Heptachlor	ND	79	84	6.1	81	85	4.8	40 - 140	30
Heptachlor epoxide	ND	80	85	6.1	83	86	3.6	40 - 140	30
Methoxychlor	ND	65	74	12.9	68	72	5.7	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	92	73	78	6.6	76	77	1.3	30 - 150	30
% TCMX	87	88	93	5.5	92	93	1.1	30 - 150	30

QA/QC Batch 199618, QC Sample No: BB79026 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

Polychlorinated Biphenyls - Solid

PCB-1016	ND	99	97	2.0	107	95	11.9	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	100	97	3.0	109	102	6.6	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	90	81	77	5.1	89	83	7.0	30 - 150	30
% TCMX (Surrogate Rec)	84	83	81	2.4	89	80	10.7	30 - 150	30

QA/QC Batch 199680, QC Sample No: BB79026 (BB79026, BB79027, BB79028, BB79032, BB79035, BB79036, BB79038, BB79039)

Volatiles - Solid

1,1,1,2-Tetrachloroethane	ND	124			94	101	7.2	70 - 130	30
1,1,1-Trichloroethane	ND	101			78	89	13.2	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	120			98	111	12.4	70 - 130	30
1,1,2-Trichloroethane	ND	123			88	94	6.6	70 - 130	30
1,1-Dichloroethane	ND	103			76	87	13.5	70 - 130	30
1,1-Dichloroethene	ND	92			77	78	1.3	70 - 130	30
1,1-Dichloropropene	ND	106			82	91	10.4	70 - 130	30
1,2,3-Trichlorobenzene	ND	137			73	91	22.0	70 - 130	30
1,2,3-Trichloropropane	ND	115			75	89	17.1	70 - 130	30
1,2,4-Trichlorobenzene	ND	136			76	88	14.6	70 - 130	30
1,2,4-Trimethylbenzene	ND	125			88	93	5.5	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	127			91	113	21.6	70 - 130	30
1,2-Dichlorobenzene	ND	124			84	92	9.1	70 - 130	30
1,2-Dichloroethane	ND	117			86	92	6.7	70 - 130	30
1,2-Dichloropropane	ND	118			87	91	4.5	70 - 130	30
1,3,5-Trimethylbenzene	ND	127			92	98	6.3	70 - 130	30
1,3-Dichlorobenzene	ND	127			86	91	5.6	70 - 130	30
1,3-Dichloropropane	ND	121			90	95	5.4	70 - 130	30
1,4-Dichlorobenzene	ND	123			83	89	7.0	70 - 130	30
2,2-Dichloropropane	ND	105			80	90	11.8	70 - 130	30
2-Chlorotoluene	ND	129			94	98	4.2	70 - 130	30

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Hexanone	ND	67			52	61	15.9	70 - 130	30	l,m
2-Isopropyltoluene	ND	99			92	96	4.3	70 - 130	30	
4-Chlorotoluene	ND	124			90	94	4.3	70 - 130	30	
4-Methyl-2-pentanone	ND	89			84	97	14.4	70 - 130	30	
Acetone	ND	58			<40	<40	NC	70 - 130	30	l,m
Acrylonitrile	ND	76			64	87	30.5	70 - 130	30	m
Benzene	ND	115			86	91	5.6	70 - 130	30	
Bromobenzene	ND	132			93	97	4.2	70 - 130	30	l
Bromochloromethane	ND	110			78	92	16.5	70 - 130	30	
Bromodichloromethane	ND	119			89	92	3.3	70 - 130	30	
Bromoform	ND	123			92	103	11.3	70 - 130	30	
Bromomethane	ND	89			71	67	5.8	70 - 130	30	m
Carbon Disulfide	ND	73			73	76	4.0	70 - 130	30	
Carbon tetrachloride	ND	101			78	88	12.0	70 - 130	30	
Chlorobenzene	ND	121			91	94	3.2	70 - 130	30	
Chloroethane	ND	97			74	77	4.0	70 - 130	30	
Chloroform	ND	104			76	86	12.3	70 - 130	30	
Chloromethane	ND	101			76	90	16.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	108			80	90	11.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	125			90	94	4.3	70 - 130	30	
Dibromochloromethane	ND	125			94	100	6.2	70 - 130	30	
Dibromoethane	ND	125			92	98	6.3	70 - 130	30	
Dibromomethane	ND	122			87	92	5.6	70 - 130	30	
Dichlorodifluoromethane	ND	104			91	82	10.4	70 - 130	30	
Ethylbenzene	ND	122			91	93	2.2	70 - 130	30	
Hexachlorobutadiene	ND	130			79	90	13.0	70 - 130	30	
Isopropylbenzene	ND	126			97	99	2.0	70 - 130	30	
m&p-Xylene	ND	124			89	90	1.1	70 - 130	30	
Methyl ethyl ketone	ND	63			<40	46	NC	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	83			76	83	8.8	70 - 130	30	
Methylene chloride	ND	94			70	74	5.6	70 - 130	30	
Naphthalene	ND	136			79	101	24.4	70 - 130	30	l
n-Butylbenzene	ND	125			86	89	3.4	70 - 130	30	
n-Propylbenzene	ND	121			96	97	1.0	70 - 130	30	
o-Xylene	ND	112			89	93	4.4	70 - 130	30	
p-Isopropyltoluene	ND	134			93	96	3.2	70 - 130	30	l
sec-Butylbenzene	ND	124			95	95	0.0	70 - 130	30	
Styrene	ND	112			88	91	3.4	70 - 130	30	
tert-Butylbenzene	ND	127			98	100	2.0	70 - 130	30	
Tetrachloroethene	ND	125			95	98	3.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	75			70	91	26.1	70 - 130	30	
Toluene	ND	118			80	81	1.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	96			74	79	6.5	70 - 130	30	
trans-1,3-Dichloropropene	ND	123			87	93	6.7	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	100			89	104	15.5	70 - 130	30	
Trichloroethene	ND	121			86	89	3.4	70 - 130	30	
Trichlorofluoromethane	ND	109			75	76	1.3	70 - 130	30	
Trichlorotrifluoroethane	ND	75			76	78	2.6	70 - 130	30	
Vinyl chloride	ND	98			77	81	5.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	98			97	100	3.0	70 - 130	30	
% Bromofluorobenzene	95	99			98	97	1.0	70 - 130	30	
% Dibromofluoromethane	117	86			82	105	24.6	70 - 130	30	
% Toluene-d8	97	98			97	96	1.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB79026

Comment:

The LCSD is not reported for this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199614, QC Sample No: BB79026 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

Semivolatiles - Solid

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,4,5-Tetrachlorobenzene	ND	36	37	2.7	40	40	0.0	30 - 130	30	
1,2,4-Trichlorobenzene	ND	62	64	3.2	68	67	1.5	30 - 130	30	
1,2-Dichlorobenzene	ND	74	72	2.7	78	78	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	71	70	1.4	76	75	1.3	30 - 130	30	
1,4-Dichlorobenzene	ND	71	69	2.9	74	75	1.3	30 - 130	30	
2,4,5-Trichlorophenol	ND	79	77	2.6	81	83	2.4	30 - 130	30	
2,4,6-Trichlorophenol	ND	75	74	1.3	77	77	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	73	75	2.7	81	78	3.8	30 - 130	30	
2,4-Dimethylphenol	ND	49	50	2.0	58	57	1.7	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	5.2	5.6	7.4	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	78	77	1.3	81	81	0.0	30 - 130	30	
2,6-Dinitrotoluene	ND	82	80	2.5	85	86	1.2	30 - 130	30	
2-Chloronaphthalene	ND	78	77	1.3	81	84	3.6	30 - 130	30	
2-Chlorophenol	ND	82	81	1.2	89	89	0.0	30 - 130	30	
2-Methylnaphthalene	ND	69	71	2.9	78	76	2.6	30 - 130	30	
2-Methylphenol (o-cresol)	ND	82	81	1.2	91	91	0.0	30 - 130	30	
2-Nitroaniline	ND	118	124	5.0	126	132	4.7	30 - 130	30	m
2-Nitrophenol	ND	55	59	7.0	64	63	1.6	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	77	76	1.3	84	82	2.4	30 - 130	30	
3,3'-Dichlorobenzidine	ND	53	54	1.9	59	60	1.7	30 - 130	30	
3-Nitroaniline	ND	127	134	5.4	132	141	6.6	30 - 130	30	l,m
4,6-Dinitro-2-methylphenol	ND	38	43	12.3	61	62	1.6	30 - 130	30	
4-Bromophenyl phenyl ether	ND	77	76	1.3	82	81	1.2	30 - 130	30	
4-Chloro-3-methylphenol	ND	83	82	1.2	92	88	4.4	30 - 130	30	
4-Chloroaniline	ND	97	102	5.0	104	106	1.9	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	77	74	4.0	80	81	1.2	30 - 130	30	
4-Nitroaniline	ND	87	86	1.2	92	93	1.1	30 - 130	30	
4-Nitrophenol	ND	85	87	2.3	90	94	4.3	30 - 130	30	
Acenaphthene	ND	83	82	1.2	87	87	0.0	30 - 130	30	
Acenaphthylene	ND	83	81	2.4	86	88	2.3	30 - 130	30	
Acetophenone	ND	37	36	2.7	39	39	0.0	30 - 130	30	
Aniline	ND	59	58	1.7	62	60	3.3	30 - 130	30	
Anthracene	ND	82	82	0.0	88	89	1.1	30 - 130	30	
Azobenzene	ND	41	40	2.5	43	44	2.3	30 - 130	30	
Benz(a)anthracene	ND	80	81	1.2	86	86	0.0	30 - 130	30	
Benzidine	ND	57	70	20.5	42	48	13.3	30 - 130	30	
Benzo(a)pyrene	ND	77	78	1.3	82	80	2.5	30 - 130	30	
Benzo(b)fluoranthene	ND	90	83	8.1	92	96	4.3	30 - 130	30	
Benzo(ghi)perylene	ND	74	79	6.5	73	81	10.4	30 - 130	30	
Benzo(k)fluoranthene	ND	76	78	2.6	83	78	6.2	30 - 130	30	
Benzyl butyl phthalate	ND	93	91	2.2	93	93	0.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	78	79	1.3	85	82	3.6	30 - 130	30	
Bis(2-chloroethyl)ether	ND	80	79	1.3	85	84	1.2	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	93	90	3.3	100	100	0.0	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	97	96	1.0	102	101	1.0	30 - 130	30	
Carbazole	ND	96	100	4.1	105	108	2.8	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Chrysene	ND	79	79	0.0	85	85	0.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	75	80	6.5	76	84	10.0	30 - 130	30	
Dibenzofuran	ND	78	78	0.0	84	84	0.0	30 - 130	30	
Diethyl phthalate	ND	83	82	1.2	86	87	1.2	30 - 130	30	
Dimethylphthalate	ND	81	81	0.0	85	85	0.0	30 - 130	30	
Di-n-butylphthalate	ND	85	85	0.0	86	88	2.3	30 - 130	30	
Di-n-octylphthalate	ND	99	100	1.0	105	106	0.9	30 - 130	30	
Fluoranthene	ND	75	79	5.2	81	84	3.6	30 - 130	30	
Fluorene	ND	81	81	0.0	87	88	1.1	30 - 130	30	
Hexachlorobenzene	ND	76	77	1.3	81	81	0.0	30 - 130	30	
Hexachlorobutadiene	ND	60	61	1.7	65	65	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	52	55	5.6	67	66	1.5	30 - 130	30	
Hexachloroethane	ND	70	70	0.0	76	75	1.3	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	73	78	6.6	74	82	10.3	30 - 130	30	
Isophorone	ND	75	75	0.0	80	79	1.3	30 - 130	30	
Naphthalene	ND	74	76	2.7	83	80	3.7	30 - 130	30	
Nitrobenzene	ND	75	74	1.3	81	81	0.0	30 - 130	30	
N-Nitrosodimethylamine	ND	58	59	1.7	63	63	0.0	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	74	73	1.4	81	82	1.2	30 - 130	30	
N-Nitrosodiphenylamine	ND	88	88	0.0	92	96	4.3	30 - 130	30	
Pentachloronitrobenzene	ND	74	74	0.0	79	80	1.3	30 - 130	30	
Pentachlorophenol	ND	41	43	4.8	53	53	0.0	30 - 130	30	
Phenanthrene	ND	82	82	0.0	89	88	1.1	30 - 130	30	
Phenol	ND	84	82	2.4	90	88	2.2	30 - 130	30	
Pyrene	ND	76	79	3.9	81	85	4.8	30 - 130	30	
Pyridine	ND	29	28	3.5	28	27	3.6	30 - 130	30	l,m
% 2,4,6-Tribromophenol	63	77	78	1.3	77	78	1.3	15 - 130	30	
% 2-Fluorobiphenyl	64	73	71	2.8	75	77	2.6	30 - 130	30	
% 2-Fluorophenol	72	80	80	0.0	89	87	2.3	15 - 130	30	
% Nitrobenzene-d5	67	74	72	2.7	79	78	1.3	30 - 130	30	
% Phenol-d5	73	83	82	1.2	89	88	1.1	15 - 130	30	
% Terphenyl-d14	82	86	90	4.5	88	94	6.6	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 199810, QC Sample No: BB80386 (BB79029, BB79030, BB79031, BB79033, BB79034)

Volatiles - Solid

1,1,1,2-Tetrachloroethane	ND	92	87	5.6	84	82	2.4	70 - 130	30	
1,1,1-Trichloroethane	ND	90	89	1.1	86	90	4.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	84	82	2.4	129	114	12.3	70 - 130	30	
1,1,2-Trichloroethane	ND	92	88	4.4	96	91	5.3	70 - 130	30	
1,1-Dichloroethane	ND	90	91	1.1	108	112	3.6	70 - 130	30	
1,1-Dichloroethene	ND	92	90	2.2	124	118	5.0	70 - 130	30	
1,1-Dichloropropene	ND	93	93	0.0	95	99	4.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	76	73	4.0	47	51	8.2	70 - 130	30	m
1,2,3-Trichloropropane	ND	89	82	8.2	118	100	16.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	70	65	7.4	53	56	5.5	70 - 130	30	l,m
1,2,4-Trimethylbenzene	ND	84	73	14.0	88	80	9.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	95	93	2.1	97	89	8.6	70 - 130	30	
1,2-Dichlorobenzene	ND	81	74	9.0	85	79	7.3	70 - 130	30	
1,2-Dichloroethane	ND	86	83	3.6	77	77	0.0	70 - 130	30	
1,2-Dichloropropane	ND	93	92	1.1	107	109	1.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3,5-Trimethylbenzene	ND	87	76	13.5	99	93	6.3	70 - 130	30	
1,3-Dichlorobenzene	ND	80	71	11.9	85	82	3.6	70 - 130	30	
1,3-Dichloropropane	ND	93	87	6.7	99	95	4.1	70 - 130	30	
1,4-Dichlorobenzene	ND	78	69	12.2	83	81	2.4	70 - 130	30	l
2,2-Dichloropropane	ND	85	86	1.2	84	87	3.5	70 - 130	30	
2-Chlorotoluene	ND	86	78	9.8	105	101	3.9	70 - 130	30	
2-Hexanone	ND	76	75	1.3	<40	<40	NC	70 - 130	30	m
2-Isopropyltoluene	ND	96	83	14.5	101	100	1.0	70 - 130	30	
4-Chlorotoluene	ND	80	72	10.5	96	94	2.1	70 - 130	30	
4-Methyl-2-pentanone	ND	101	97	4.0	77	72	6.7	70 - 130	30	
Acetone	ND	74	70	5.6	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	105	101	3.9	82	81	1.2	70 - 130	30	
Benzene	ND	94	93	1.1	100	105	4.9	70 - 130	30	
Bromobenzene	ND	87	81	7.1	95	90	5.4	70 - 130	30	
Bromochloromethane	ND	92	90	2.2	103	102	1.0	70 - 130	30	
Bromodichloromethane	ND	90	88	2.2	82	82	0.0	70 - 130	30	
Bromoform	ND	90	85	5.7	70	67	4.4	70 - 130	30	m
Bromomethane	ND	92	95	3.2	72	61	16.5	70 - 130	30	m
Carbon Disulfide	ND	112	104	7.4	113	103	9.3	70 - 130	30	
Carbon tetrachloride	ND	92	90	2.2	74	76	2.7	70 - 130	30	
Chlorobenzene	ND	88	82	7.1	92	91	1.1	70 - 130	30	
Chloroethane	ND	95	93	2.1	132	124	6.3	70 - 130	30	m
Chloroform	ND	88	88	0.0	94	96	2.1	70 - 130	30	
Chloromethane	ND	92	99	7.3	120	142	16.8	70 - 130	30	m
cis-1,2-Dichloroethene	ND	90	90	0.0	105	113	7.3	70 - 130	30	
cis-1,3-Dichloropropene	ND	88	86	2.3	83	83	0.0	70 - 130	30	
Dibromochloromethane	ND	91	86	5.6	80	76	5.1	70 - 130	30	
Dibromoethane	ND	92	87	5.6	87	84	3.5	70 - 130	30	
Dibromomethane	ND	91	87	4.5	93	92	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	88	91	3.4	94	99	5.2	70 - 130	30	
Ethylbenzene	ND	91	85	6.8	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	75	57	27.3	63	63	0.0	70 - 130	30	l,m
Isopropylbenzene	ND	89	83	7.0	116	114	1.7	70 - 130	30	
m&p-Xylene	ND	90	81	10.5	90	90	0.0	70 - 130	30	
Methyl ethyl ketone	ND	91	80	12.9	49	46	6.3	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	106	96	9.9	99	88	11.8	70 - 130	30	
Methylene chloride	ND	91	85	6.8	124	111	11.1	70 - 130	30	
Naphthalene	ND	80	95	17.1	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	79	64	21.0	92	90	2.2	70 - 130	30	l
n-Propylbenzene	ND	82	71	14.4	109	108	0.9	70 - 130	30	
o-Xylene	ND	97	88	9.7	93	94	1.1	70 - 130	30	
p-Isopropyltoluene	ND	87	72	18.9	99	97	2.0	70 - 130	30	
sec-Butylbenzene	ND	85	73	15.2	109	106	2.8	70 - 130	30	
Styrene	ND	96	85	12.2	77	74	4.0	70 - 130	30	
tert-Butylbenzene	ND	88	78	12.0	109	107	1.9	70 - 130	30	
Tetrachloroethene	ND	92	85	7.9	90	91	1.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	103	100	3.0	131	121	7.9	70 - 130	30	m
Toluene	ND	92	89	3.3	93	96	3.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	82	16.8	116	105	10.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	86	83	3.6	75	76	1.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	93	5.2	95	83	13.5	70 - 130	30	
Trichloroethene	ND	96	93	3.2	88	93	5.5	70 - 130	30	
Trichlorofluoromethane	ND	106	103	2.9	90	91	1.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Trichlorotrifluoroethane	ND	102	103	1.0	115	107	7.2	70 - 130	30	
Vinyl chloride	ND	97	97	0.0	133	138	3.7	70 - 130	30	m
% 1,2-dichlorobenzene-d4	100	99	98	1.0	101	98	3.0	70 - 130	30	
% Bromofluorobenzene	89	98	97	1.0	85	85	0.0	70 - 130	30	
% Dibromofluoromethane	96	101	102	1.0	99	102	3.0	70 - 130	30	
% Toluene-d8	100	100	99	1.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199975, QC Sample No: BB81419 (BB79037)

Volatiles - Solid

1,1,1,2-Tetrachloroethane	ND	96	94	2.1	99	98	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	95	87	8.8	94	113	18.4	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	98	89	9.6	100	107	6.8	70 - 130	30	
1,1,2-Trichloroethane	ND	99	94	5.2	101	101	0.0	70 - 130	30	
1,1-Dichloroethane	ND	111	87	24.2	92	114	21.4	70 - 130	30	
1,1-Dichloroethene	ND	96	94	2.1	106	104	1.9	70 - 130	30	
1,1-Dichloropropene	ND	87	91	4.5	98	92	6.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	100	90	10.5	88	93	5.5	70 - 130	30	
1,2,3-Trichloropropane	ND	100	91	9.4	94	105	11.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	89	87	2.3	90	88	2.2	70 - 130	30	
1,2,4-Trimethylbenzene	ND	94	93	1.1	98	97	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	107	99	7.8	101	107	5.8	70 - 130	30	
1,2-Dichlorobenzene	ND	92	90	2.2	96	93	3.2	70 - 130	30	
1,2-Dichloroethane	ND	96	91	5.3	97	97	0.0	70 - 130	30	
1,2-Dichloropropane	ND	99	97	2.0	102	100	2.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	95	94	1.1	97	97	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	89	90	1.1	97	93	4.2	70 - 130	30	
1,3-Dichloropropane	ND	98	97	1.0	99	101	2.0	70 - 130	30	
1,4-Dichlorobenzene	ND	87	87	0.0	96	92	4.3	70 - 130	30	
2,2-Dichloropropane	ND	106	84	23.2	90	114	23.5	70 - 130	30	
2-Chlorotoluene	ND	93	93	0.0	99	96	3.1	70 - 130	30	
2-Hexanone	ND	103	91	12.4	58	66	12.9	70 - 130	30	m
2-Isopropyltoluene	ND	105	106	0.9	100	95	5.1	70 - 130	30	
4-Chlorotoluene	ND	87	89	2.3	99	97	2.0	70 - 130	30	
4-Methyl-2-pentanone	ND	118	104	12.6	89	100	11.6	70 - 130	30	
Acetone	ND	123	110	11.2	<40	43	NC	70 - 130	30	m
Acrylonitrile	ND	132	97	30.6	86	118	31.4	70 - 130	30	l,r
Benzene	ND	97	96	1.0	101	99	2.0	70 - 130	30	
Bromobenzene	ND	94	94	0.0	95	96	1.0	70 - 130	30	
Bromochloromethane	ND	107	84	24.1	87	111	24.2	70 - 130	30	
Bromodichloromethane	ND	99	99	0.0	102	100	2.0	70 - 130	30	
Bromoform	ND	97	98	1.0	104	101	2.9	70 - 130	30	
Bromomethane	ND	94	105	11.1	112	94	17.5	70 - 130	30	
Carbon Disulfide	ND	116	115	0.9	107	104	2.8	70 - 130	30	
Carbon tetrachloride	ND	110	86	24.5	91	112	20.7	70 - 130	30	
Chlorobenzene	ND	89	92	3.3	98	95	3.1	70 - 130	30	
Chloroethane	ND	104	104	0.0	108	96	11.8	70 - 130	30	
Chloroform	ND	109	87	22.4	91	112	20.7	70 - 130	30	
Chloromethane	ND	102	94	8.2	92	97	5.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	107	86	21.8	92	111	18.7	70 - 130	30	
cis-1,3-Dichloropropene	ND	98	96	2.1	103	102	1.0	70 - 130	30	
Dibromochloromethane	ND	98	96	2.1	100	102	2.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB79026

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromoethane	ND	97	94	3.1	100	99	1.0	70 - 130	30	
Dibromomethane	ND	97	94	3.1	99	101	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	87	99	12.9	96	88	8.7	70 - 130	30	
Ethylbenzene	ND	92	96	4.3	100	95	5.1	70 - 130	30	
Hexachlorobutadiene	ND	88	89	1.1	90	86	4.5	70 - 130	30	
Isopropylbenzene	ND	94	95	1.1	101	100	1.0	70 - 130	30	
m&p-Xylene	ND	91	94	3.2	100	95	5.1	70 - 130	30	
Methyl ethyl ketone	ND	107	89	18.4	44	52	16.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	95	105	10.0	70 - 130	30	
Methylene chloride	ND	85	83	2.4	90	88	2.2	70 - 130	30	
Naphthalene	ND	110	97	12.6	93	103	10.2	70 - 130	30	
n-Butylbenzene	ND	92	94	2.2	100	94	6.2	70 - 130	30	
n-Propylbenzene	ND	86	89	3.4	99	96	3.1	70 - 130	30	
o-Xylene	ND	99	104	4.9	100	96	4.1	70 - 130	30	
p-Isopropyltoluene	ND	97	99	2.0	102	97	5.0	70 - 130	30	
sec-Butylbenzene	ND	91	93	2.2	101	96	5.1	70 - 130	30	
Styrene	ND	101	104	2.9	102	97	5.0	70 - 130	30	
tert-Butylbenzene	ND	92	95	3.2	100	96	4.1	70 - 130	30	
Tetrachloroethene	ND	89	90	1.1	97	94	3.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	125	95	27.3	84	116	32.0	70 - 130	30	r
Toluene	ND	97	95	2.1	102	99	3.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	95	2.1	103	105	1.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	94	3.1	101	100	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	113	108	4.5	101	107	5.8	70 - 130	30	
Trichloroethene	ND	93	96	3.2	98	95	3.1	70 - 130	30	
Trichlorofluoromethane	ND	117	117	0.0	108	104	3.8	70 - 130	30	
Trichlorotrifluoroethane	ND	107	108	0.9	108	103	4.7	70 - 130	30	
Vinyl chloride	ND	98	102	4.0	103	95	8.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	103	99	4.0	98	100	2.0	70 - 130	30	
% Bromofluorobenzene	97	98	101	3.0	99	98	1.0	70 - 130	30	
% Dibromofluoromethane	117	113	84	29.4	84	123	37.7	70 - 130	30	r
% Toluene-d8	101	101	102	1.0	102	101	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
May 10, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79026

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79026	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB79026	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.172	0.010	0.15	0.15	mg/L
BB79027	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB79028	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	750	140	140	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2200	1200	1200	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	400	400	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	1200	1100	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6300	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6300	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6800	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	330	330	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	22000	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	22000	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6400	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6400	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3100	520	1000	1000	ug/Kg
BB79029	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	560	22	500	500	mg/Kg
BB79029	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	30.1	0.81	10	10	mg/Kg
BB79029	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	10100	41	400	400	mg/Kg
BB79029	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.886	0.010	0.15	0.15	mg/L
BB79030	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	730	140	140	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3200	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3600	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5300	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3000	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3000	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	510	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79026

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79030	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	510	1000	1000	ug/Kg
BB79030	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	12.3	0.80	10	10	mg/Kg
BB79030	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.706	0.010	0.15	0.15	mg/L
BB79031	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	730	140	140	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	400	400	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1400	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	510	330	330	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2800	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	510	1000	1000	ug/Kg
BB79031	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	21.1	0.79	10	10	mg/Kg
BB79031	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	850	4.0	400	400	mg/Kg
BB79031	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.45	0.010	0.15	0.15	mg/L
BB79032	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	760	140	140	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2200	1200	1200	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	540	400	400	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3500	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3500	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4600	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	540	330	330	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6700	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6700	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3100	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3100	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	540	1000	1000	ug/Kg
BB79032	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	600	23	500	500	mg/Kg
BB79032	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	19.1	0.72	10	10	mg/Kg
BB79032	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1230	3.6	400	400	mg/Kg
BB79032	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.67	0.010	0.15	0.15	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79026

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79033	MAGU-DAS	$8260MAR	Acrylonitrile	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	100	100	ug/Kg
BB79033	MAGU-DAS	$8260MAR	Benzene	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	200	200	ug/Kg
BB79033	MAGU-DAS	$8260MAR	1,2-Dichloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	200	200	ug/Kg
BB79033	MAGU-DAS	$8260MAR	Bromodichloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	110	110	ug/Kg
BB79033	MAGU-DAS	$8260MAR	Dibromoethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	100	100	ug/Kg
BB79033	MAGU-DAS	$8260MAR	Dibromoethane	mg/kg	CT	Volatile Organic Compound	RES DEC (mg/kg)	ND	290	7	7	ug/Kg
BB79033	MAGU-DAS	$8260MAR	Dibromochloromethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	170	100	100	ug/Kg
BB79033	MAGU-DAS	$8260MAR	1,1,1,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	290	200	200	ug/Kg
BB79033	MAGU-DAS	$8260MAR	1,1,2,2-Tetrachloroethane	mg/kg	CT	Volatile Organic Compound	GB PMC (mg/kg)	ND	170	100	100	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2000	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2800	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2800	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	270	1000	1000	ug/Kg
BB79033	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	26.7	0.75	10	10	mg/Kg
BB79033	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1140	3.8	400	400	mg/Kg
BB79033	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.357	0.010	0.15	0.15	mg/L
BB79034	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	360	140	140	ug/Kg
BB79034	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB79034	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	250	1000	1000	ug/Kg
BB79034	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	250	1000	1000	ug/Kg
BB79034	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2200	250	1000	1000	ug/Kg
BB79034	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2200	250	1000	1000	ug/Kg
BB79034	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	31.9	7.3	10	10	mg/Kg
BB79034	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	513	3.7	400	400	mg/Kg
BB79034	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.352	0.010	0.15	0.15	mg/L
BB79035	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	260	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB79026

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB79035	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	260	1000	1000	ug/Kg
BB79035	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20.5	0.76	10	10	mg/Kg
BB79035	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	490	3.8	400	400	mg/Kg
BB79035	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.962	0.010	0.15	0.15	mg/L
BB79036	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	360	140	140	ug/Kg
BB79036	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	250	1000	1000	ug/Kg
BB79036	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	250	1000	1000	ug/Kg
BB79036	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1900	250	1000	1000	ug/Kg
BB79036	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20.5	0.74	10	10	mg/Kg
BB79036	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	606	3.7	400	400	mg/Kg
BB79036	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.154	0.010	0.15	0.15	mg/L
BB79037	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	740	140	140	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1200	1200	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	400	400	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	1100	1000	1000	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	520	1000	1000	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	520	330	330	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	520	1000	1000	ug/Kg
BB79037	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	520	1000	1000	ug/Kg
BB79037	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	15.2	0.67	10	10	mg/Kg
BB79037	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	692	3.3	400	400	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037, BB79038, BB79039

Sampling Date(s): 4/30/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, ICP Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Thursday, May 10, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

The client requested a shorter list of elements than the 6010 RCP list.

Not all constituents met requested criteria due to the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/02/12-2 (BB79026, BB79027, BB79028, BB79030, BB79031, BB79033, BB79037)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/2/2012

Instrument: Au-fid84 05/03/12-1 (BB79029, BB79032)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/3/2012

Instrument: Au-xl1 05/02/12-2 (BB79034, BB79035, BB79036)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 5/2/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Batch Specific)

---------- Sample No: BB78695, QA/QC Batch: 199550 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199629 (Samples: BB79026, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037): -----

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichloroprop)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the method criteria, therefore a low bias is likely. (2,4-DB)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Dinoseb)

Instrument: Au-ecd14 05/02/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

Initial Calibration ECD14-043012
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/2/2012

QC Comments: QC Batch 99629 05/01/12 (BB79026, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The MS/MSD recovery could not be determined for this compound due to the interference from a non-target peak.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79026, QA/QC Batch: 199629 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: Dichloroprop(37%), Dinoseb(20%)

All LCSD recoveries were within 40 - 140 with the following exceptions: Dinoseb(32%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Dinoseb(46.2%)

All MS recoveries were within 30 - 150 with the following exceptions: Dinoseb(26%)

All MSD recoveries were within 30 - 150 with the following exceptions: 2,4-DB(28%), Dinoseb(4.3%)

All MS/MSD RPDs were less than 30% with the following exceptions: Dinoseb(143.2%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB77192, QA/QC Batch: 199245 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/02/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/2/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Batch Specific)

---------- Sample No: BB77808, QA/QC Batch: 199654 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB78970, QA/QC Batch: 199655 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199627 (Samples: BB79032, BB79033, BB79034, BB79035, BB79036, BB79037): -----

The MS and/or the MSD recovery is above the upper range, therefore a slight high bias is possible. (Lead)

Instrument: Icp9 05/03/12-1 (BB79028, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/3/2012

Instrument: Icp9 05/04/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

Printed Name Laura Kinnin
Position: Chemist
Date: 5/4/2012

Instrument: Icp9 05/05/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/5/2012

Instrument: Icp9 05/06/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/6/2012

Instrument: Icp9 05/07/12-1 (BB79034, BB79035, BB79036, BB79037)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/7/2012

Instrument: Icp9 05/08/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

Printed Name Laura Kinnin
Position: Chemist
Date: 5/8/2012

Instrument: Icp9 05/09/12-1 (BB79029, BB79030, BB79031)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/9/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79028, QA/QC Batch: 199667 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB79034, QA/QC Batch: 199627 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: Lead(>130%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB78787, QA/QC Batch: 199626 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd5 05/02/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

8082 Narration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/2/2012

Instrument: Au-ecd5 05/03/12-1 (BB79026)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/3/2012

Instrument: Au-ecd6 05/04/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/4/2012

Instrument: Au-ecd7 05/03/12-1 (BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/3/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79026, QA/QC Batch: 199618 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 40 - 140 with the following exceptions: None.

All MSD recoveries were within 40 - 140 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 05/02/12-1 (BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/2/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79026, QA/QC Batch: 199619 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199614 (Samples: BB79026, BB79027, BB79028, BB79029, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pyridine)

The LCS and/ or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (3-Nitroaniline)

The MS and/or the MSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline,3-Nitroanline)

Instrument: Chem07 05/02/12-1 (BB79029)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem07/SV_0410):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrophenol, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: 4-Chloroaniline, 3-Nitroaniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Pentachlorophenol, Carbazole, 3,3'-dichlorobenzidine

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

Printed Name Damien Drobinski
Position: Chemist
Date: 5/2/2012

Instrument: Chem09 05/01/12-1 (BB79026, BB79030, BB79031, BB79032, BB79033, BB79034, BB79035, BB79036, BB79037)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0427):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 4-chloroaniline, Hexachlorocyclopentadiene, 2,4-dinitrophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, Aniline, Hexachlorocyclopentadiene

Printed Name Damien Drobinski
Position: Chemist
Date: 5/1/2012

Instrument: Chem09 05/02/12-1 (BB79026, BB79027, BB79028)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0427):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 4-chloroaniline, Hexachlorocyclopentadiene, 2,4-dinitrophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, Bis(2-chloroisopropyl)ether, Hexachlorocyclopentadiene, 2-Nitroaniline

Printed Name Damien Drobinski
Position: Chemist
Date: 5/2/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79026, QA/QC Batch: 199614 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), Pyridine(29%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 3-Nitroaniline(134%), Pyridine(28%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(5.2%), 3-Nitroaniline(132%), Pyridine(28%)

All MSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(5.6%), 2-Nitroaniline(132%), 3-Nitroaniline(141%), Pyridine(27%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 199810 (Samples: BB79029, BB79030, BB79031, BB79033, BB79034): -----

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is below range . A low bias for these compounds is possible. (Compounds listed below)

QC Batch 199975 (Samples: BB79037): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

QC Batch 199680 (Samples: BB79026, BB79027, BB79028, BB79032, BB79035,BB79036, BB7038, BB79039): -----

The LCS recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

Instrument: Chem03 05/02/12-1 (BB79029, BB79030, BB79031, BB79033, BB79034)

Initial Calibration Verification (RCPS_0502):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Acrolein, Acetone and Methyl Ethyl Ketone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 5/2/2012

Instrument: Chem11 05/01/12-1 (BB79026, BB79027, BB79028, BB79032, BB79035, BB79036, BB79038, BB79039)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

Initial Calibration Verification (CHEM11/RCPS_0430):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Acrylonitrile, Tetrahydrofuran and Methyl Ethyl Ketone

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 5/1/2012

Instrument: Chem11 05/03/12-1 (BB79037)

Initial Calibration Verification (CHEM11/RCPS_0502):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Methylene Chloride, Acrylonitrile

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 5/3/2012

QC Comments: QC Batch 99680 05/02/12 (BB79026, BB79027, BB79028, BB79032, BB79035, BB79036, BB79038, BB79039)

The LCSD is not reported for this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

May 10, 2012

SDG I.D.: GBB79026

QC (Site Specific)

---------- Sample No: BB79026, QA/QC Batch: 199680 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(137%), 1,2,4-Trichlorobenzene(136%), 2-Hexanone(67%), Acetone(58%), Bromobenzene(132%), Methyl ethyl ketone(63%), Naphthalene(136%), p-Isopropyltoluene(134%)

All MS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(52%), Acetone(<40%), Acrylonitrile(64%), Methyl ethyl ketone(<40%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(61%), Acetone(<40%), Bromomethane(67%), Methyl ethyl ketone(46%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB80386, QA/QC Batch: 199810 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,2,4-Trichlorobenzene(65%), 1,4-Dichlorobenzene(69%), Hexachlorobutadiene(57%), n-Butylbenzene(64%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB81419, QA/QC Batch: 199975 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Acrylonitrile(132%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: Acrylonitrile(30.6%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike. P.O. Box 370. Manchester. CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 2

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Sampler's Signature: [signature] Date: 4-30-12

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification		Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 metals	SPLP RCRA 8 metals					Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
79026	GP-44	10'-12'	S	4-30-12	2:05pm	X	X	X	X	X	X	X					3	2								
79027	GP-45	10'-12'	↓		1:35pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79028	GP-46	10'-12'	↓		12:58pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79029	GP-47	2'-4'	↓		12:30pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79030	GP-48	2'-4'	↓		11:51am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79031	GP-49	2'-4'	↓		11:24am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79032	GP-50	2'-4'	↓		10:51am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79033	GP-51	1'-3'	↓		10:19am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79034	GP-52	2'-4'	↓		9:58am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79035	GP-53	2'-4'	↓		9:37am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79036	GP-54	2'-4'	↓		9:04am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79037	GP-55	2'-4'	↓		8:47am	↓	↓	↓	↓	↓	↓	↓					↓	↓								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/1/12	10:45
[signature]	CParadise	5/1/12	1341

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 2 of 2

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: MNRR Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-30-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	Soil VOA Vials [ ] methanol [2] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
79038	TB-8 LL	S	4-30-12	←	X	3									
79039	TB HL														

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/1/12	1045
[signature]	CParadise	5/1/12	1341

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 2

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Sampler's Signature: [signature] Date: 4-30-12

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals					Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
79026	GP-44 10'-12'	S	4-30-12	2:05pm	X	X	X	X	X	X	X					3	2								
79027	GP-45 10'-12'	↓		1:35pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79028	GP-46 10'-12'	↓		12:58pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79029	GP-47 2'-4'	↓		12:30pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79030	GP-48 2'-4'	↓		11:51am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79031	GP-49 2'-4'	↓		11:24am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79032	GP-50 2'-4'	↓		10:51am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79033	GP-51 1'-3'	↓		10:19am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79034	GP-52 2'-4'	↓		9:58am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79035	GP-53 2'-4'	↓		9:37am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79036	GP-54 2'-4'	↓		9:04am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
79037	GP-55 2'-4'	↓		8:47am	↓	↓	↓	↓	↓	↓	↓					↓	↓								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/1/12	10:45
[signature]	Cparadise	5/1/12	1341

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Monday, April 30, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB73578 - BB73587

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	11:15
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73578

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-73 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	04/19/12		EK	6010
Arsenic	4.80	0.74	mg/Kg	04/19/12		EK	6010
Barium	27.2	0.37	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	04/19/12		EK	6010
Chromium	10.9	0.37	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	6.32	0.37	mg/Kg	04/19/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	0.017	0.004	mg/L	04/20/12		LK	6010
SPLP Barium	0.062	0.010	mg/L	04/20/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	0.011	0.010	mg/L	04/20/12		LK	6010
SPLP Mercury	0.0005	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	0.032	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	96		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/20/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/20/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-73 2-4 FT

Phoenix I.D.: BB73578

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	68		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/23/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/23/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	66		%	04/23/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/23/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/23/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	84		%	04/23/12		MH	30 - 150 %
% TCMX	87		%	04/23/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/25/12		K/M	SW8081
4,4' -DDE	ND	33	ug/Kg	04/25/12		K/M	SW8081
4,4' -DDT	ND	33	ug/Kg	04/25/12		K/M	SW8081
a-BHC	ND	17	ug/Kg	04/25/12		K/M	SW8081
Alachlor	ND	17	ug/Kg	04/25/12		K/M	SW8081
Aldrin	ND	5.2	ug/Kg	04/25/12		K/M	SW8081
b-BHC	ND	17	ug/Kg	04/25/12		K/M	SW8081
Chlordane	ND	52	ug/Kg	04/25/12		K/M	SW8081
d-BHC	ND	17	ug/Kg	04/25/12		K/M	SW8081
Dieldrin	ND	5.2	ug/Kg	04/25/12		K/M	SW8081
Endosulfan I	ND	17	ug/Kg	04/25/12		K/M	SW8081
Endosulfan II	ND	33	ug/Kg	04/25/12		K/M	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/25/12		K/M	SW8081
Endrin	ND	33	ug/Kg	04/25/12		K/M	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/25/12		K/M	SW8081
Endrin ketone	ND	33	ug/Kg	04/25/12		K/M	SW8081
g-BHC	ND	5.2	ug/Kg	04/25/12		K/M	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-73 2-4 FT

Phoenix I.D.: BB73578

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/25/12		K/M	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/25/12		K/M	SW8081
Methoxychlor	ND	170	ug/Kg	04/25/12		K/M	SW8081
Toxaphene	ND	170	ug/Kg	04/25/12		K/M	SW8081
QA/QC Surrogates							
% DCBP	88		%	04/25/12		K/M	30 - 150 %
% TCMX	77		%	04/25/12		K/M	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT Phoenix I.D.: BB73578
Client ID: GP-73 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	95		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	101		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	96		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	540	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-73 2-4 FT

Phoenix I.D.: BB73578

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	540	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	540	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	980	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	540	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	980	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	980	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	980	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-73 2-4 FT

Phoenix I.D.: BB73578

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	84		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	59		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	61		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	66		%	04/18/12		DD	15 - 130 %
% Phenol-d5	61		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	81		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 30, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	11:26
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73579

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-74 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	04/19/12		EK	6010
Arsenic	2.91	0.69	mg/Kg	04/19/12		EK	6010
Barium	22.3	0.35	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.35	0.35	mg/Kg	04/19/12		EK	6010
Chromium	8.87	0.35	mg/Kg	04/19/12		EK	6010
Mercury	< 0.08	0.08	mg/Kg	04/19/12		RS	SW-7471
Lead	6.54	0.35	mg/Kg	04/19/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	0.007	0.004	mg/L	04/20/12		LK	6010
SPLP Barium	0.043	0.010	mg/L	04/20/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	0.019	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		SS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-74 2-4 FT

Phoenix I.D.: BB73579

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	70		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	74		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	108		%	04/20/12		MH	30 - 150 %
% TCMX	95		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	79		%	04/19/12		MR	30 - 150 %
% TCMX	84		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.4	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	93		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	101		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	99		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-74 2-4 FT

Phoenix I.D.: BB73579

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	990	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-74 2-4 FT

Phoenix I.D.: BB73579

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	91		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	66		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/18/12		DD	15 - 130 %
% Phenol-d5	68		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	87		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	11:41
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73580

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-75 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.32	0.32	mg/Kg	04/19/12		EK	6010
Arsenic	3.02	0.65	mg/Kg	04/19/12		EK	6010
Barium	31.6	0.32	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.32	0.32	mg/Kg	04/19/12		EK	6010
Chromium	8.38	0.32	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	9.61	0.32	mg/Kg	04/19/12		EK	6010
Selenium	< 1.3	1.3	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	0.012	0.004	mg/L	04/20/12		LK	6010
SPLP Barium	0.111	0.010	mg/L	04/20/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	0.013	0.010	mg/L	04/20/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	0.065	0.010	mg/L	04/20/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-75 2-4 FT

Phoenix I.D.: BB73580

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	71		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	74		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	111		%	04/20/12		MH	30 - 150 %
% TCMX	96		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/19/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-75 2-4 FT

Phoenix I.D.: BB73580

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	95		%	04/19/12		MR	30 - 150 %
% TCMX	89		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	89		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	103		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	95		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-75 2-4 FT

Phoenix I.D.: BB73580

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-75 2-4 FT

Phoenix I.D.: BB73580

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	88		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	04/18/12		DD	15 - 130 %
% Phenol-d5	66		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	88		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	12:01
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73581

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-76 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	04/19/12		EK	6010
Arsenic	2.34	0.66	mg/Kg	04/19/12		EK	6010
Barium	19.7	0.33	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.33	0.33	mg/Kg	04/19/12		EK	6010
Chromium	7.08	0.33	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	5.53	0.33	mg/Kg	04/19/12		EK	6010
Selenium	< 1.3	1.3	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	0.011	0.004	mg/L	04/20/12		LK	6010
SPLP Barium	0.044	0.010	mg/L	04/20/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	0.011	0.010	mg/L	04/20/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	0.032	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	96		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-76 3-5 FT

Phoenix I.D.: BB73581

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	72		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	62		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	114		%	04/20/12		MH	30 - 150 %
% TCMX	100		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	98		%	04/19/12		MR	30 - 150 %
% TCMX	88		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.1	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	95		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	103		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	96		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-76 3-5 FT

Phoenix I.D.: BB73581

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	280	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	260	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	580	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-76 3-5 FT

Phoenix I.D.: BB73581

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	490	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	92		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	70		%	04/18/12		DD	15 - 130 %
% Phenol-d5	66		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	84		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	12:15
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73582

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-77 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	04/19/12		EK	6010
Arsenic	3.37	0.71	mg/Kg	04/19/12		EK	6010
Barium	18.0	0.36	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	04/19/12		EK	6010
Chromium	7.02	0.36	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	4.38	0.36	mg/Kg	04/19/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/19/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-77 2-4 FT

Phoenix I.D.: BB73582

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	69		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	70		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	115		%	04/20/12		MH	30 - 150 %
% TCMX	102		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	91		%	04/19/12		MR	30 - 150 %
% TCMX	88		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	106		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	109		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	99		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-77 2-4 FT

Phoenix I.D.: BB73582

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB73582

Client ID: GP-77 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	91		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	04/18/12		DD	15 - 130 %
% Phenol-d5	66		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	87		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	12:23
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73583

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-78 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	04/19/12		EK	6010
Arsenic	3.03	0.66	mg/Kg	04/19/12		EK	6010
Barium	23.9	0.33	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.33	0.33	mg/Kg	04/19/12		EK	6010
Chromium	7.79	0.33	mg/Kg	04/19/12		EK	6010
Mercury	< 0.08	0.08	mg/Kg	04/19/12		RS	SW-7471
Lead	5.43	0.33	mg/Kg	04/19/12		EK	6010
Selenium	< 1.3	1.3	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/19/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/23/12		BS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-78 2-4 FT

Phoenix I.D.: BB73583

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	67		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/24/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/24/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	59		%	04/24/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	113		%	04/20/12		MH	30 - 150 %
% TCMX	100		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	86		%	04/19/12		MR	30 - 150 %
% TCMX	94		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	04/21/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,1-Dichloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,1-Dichloroethene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,1-Dichloropropene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2-Dichloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,2-Dichloropropane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,3-Dichloropropane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
2,2-Dichloropropane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
2-Chlorotoluene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	04/21/12		H/J	SW8260
2-Isopropyltoluene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
4-Chlorotoluene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
4-Methyl-2-pentanone	ND	25	ug/Kg	04/21/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/21/12		H/J	SW8260
Acrylonitrile	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Benzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Bromobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Bromochloromethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Bromodichloromethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Bromoform	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Bromomethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Carbon Disulfide	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Carbon tetrachloride	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Chlorobenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Chloroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Chloroform	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Chloromethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	04/21/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT Phoenix I.D.: BB73583
Client ID: GP-78 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Dibromomethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Ethylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Hexachlorobutadiene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Isopropylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
m&p-Xylene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/21/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/21/12		H/J	SW8260
Methylene chloride	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Naphthalene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
n-Butylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
n-Propylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
o-Xylene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
p-Isopropyltoluene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
sec-Butylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Styrene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
tert-Butylbenzene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Tetrachloroethene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/21/12		H/J	SW8260
Toluene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Total Xylenes	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/21/12		H/J	SW8260
Trichloroethene	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Trichlorofluoromethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
Vinyl chloride	ND	5.1	ug/Kg	04/21/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	04/21/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	04/21/12		H/J	70 - 130 %
% Dibromofluoromethane	111		%	04/21/12		H/J	70 - 130 %
% Toluene-d8	97		%	04/21/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	04/19/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	04/19/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	04/19/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-78 2-4 FT

Phoenix I.D.: BB73583

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	04/19/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/19/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	04/19/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/19/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	04/19/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	04/19/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Acenaphthylene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	04/19/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Anthracene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/19/12		DD	SW 8270
Benz(a)anthracene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/19/12		DD	SW 8270
Benzo(a)pyrene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Benzo(b)fluoranthene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Benzo(ghi)perylene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Benzo(k)fluoranthene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	04/19/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Carbazole	ND	530	ug/Kg	04/19/12		DD	SW 8270
Chrysene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	04/19/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	04/19/12		DD	SW 8270
Fluoranthene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	04/19/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	04/19/12		DD	SW 8270
Naphthalene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB73583

Client ID: GP-78 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/19/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/19/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/19/12		DD	SW 8270
Phenanthrene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Phenol	ND	250	ug/Kg	04/19/12		DD	SW 8270
Pyrene	ND	250	ug/Kg	04/19/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/19/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	79		%	04/19/12		DD	15 - 130 %
% 2-Fluorobiphenyl	56		%	04/19/12		DD	15 - 130 %
% 2-Fluorophenol	60		%	04/19/12		DD	15 - 130 %
% Nitrobenzene-d5	63		%	04/19/12		DD	15 - 130 %
% Phenol-d5	59		%	04/19/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/19/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	12:37
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73584

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-79 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	04/19/12		EK	6010
Arsenic	5.61	0.73	mg/Kg	04/19/12		EK	6010
Barium	21.9	0.37	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	04/19/12		EK	6010
Chromium	7.19	0.37	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	4.78	0.37	mg/Kg	04/19/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	0.004	0.004	mg/L	04/20/12		LK	6010
SPLP Barium	0.020	0.010	mg/L	04/19/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	96		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-79 2-4 FT

Phoenix I.D.: BB73584

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	70		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	59		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	113		%	04/20/12		MH	30 - 150 %
% TCMX	100		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	83		%	04/19/12		MR	30 - 150 %
% TCMX	88		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.2	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	100		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	100		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-79 2-4 FT

Phoenix I.D.: BB73584

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/19/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/19/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/19/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/19/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/19/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	04/19/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/19/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-79 2-4 FT

Phoenix I.D.: BB73584

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/19/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/19/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/19/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/19/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	04/19/12		DD	15 - 130 %
% 2-Fluorobiphenyl	66		%	04/19/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/19/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/19/12		DD	15 - 130 %
% Phenol-d5	69		%	04/19/12		DD	15 - 130 %
% Terphenyl-d14	90		%	04/19/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	12:45
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73585

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-80 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/19/12		EK	6010
Arsenic	7.08	0.68	mg/Kg	04/19/12		EK	6010
Barium	20.0	0.34	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/19/12		EK	6010
Chromium	7.13	0.34	mg/Kg	04/19/12		EK	6010
Mercury	< 0.07	0.07	mg/Kg	04/19/12		RS	SW-7471
Lead	4.09	0.34	mg/Kg	04/19/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	04/19/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/19/12		EK	6010
SPLP Barium	0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-80 2-4 FT

Phoenix I.D.: BB73585

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	88	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	88	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	52		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	112		%	04/20/12		MH	30 - 150 %
% TCMX	98		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	84		%	04/19/12		MR	30 - 150 %
% TCMX	91		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	120	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-80 2-4 FT

Phoenix I.D.: BB73585

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	98		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	114		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	96		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-80 2-4 FT

Phoenix I.D.: BB73585

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/19/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/19/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/19/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/19/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/19/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/19/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/19/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/19/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/19/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-80 2-4 FT

Phoenix I.D.: BB73585

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/19/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/19/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/19/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/19/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	85		%	04/19/12		DD	15 - 130 %
% 2-Fluorobiphenyl	62		%	04/19/12		DD	15 - 130 %
% 2-Fluorophenol	65		%	04/19/12		DD	15 - 130 %
% Nitrobenzene-d5	68		%	04/19/12		DD	15 - 130 %
% Phenol-d5	64		%	04/19/12		DD	15 - 130 %
% Terphenyl-d14	85		%	04/19/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	13:00
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73586

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-81 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	04/20/12		LK	6010
Arsenic	2.65	0.74	mg/Kg	04/20/12		LK	6010
Barium	19.7	0.37	mg/Kg	04/19/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	04/20/12		LK	6010
Chromium	9.03	0.37	mg/Kg	04/19/12		EK	6010
Mercury	< 0.06	0.06	mg/Kg	04/19/12		RS	SW-7471
Lead	7.22	0.37	mg/Kg	04/20/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/19/12		EK	6010
SPLP Barium	0.012	0.010	mg/L	04/19/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/19/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/19/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/19/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/19/12		EK	6010
Total Metals Digest	Completed			04/18/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/19/12		X/X	SW846-3005
Percent Solid	95		%	04/18/12		JL	E160.3
Soil Extraction for PCB	Completed			04/18/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/18/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/18/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/18/12		RS/F	3545
Mercury Digestion	Completed			04/19/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/18/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/19/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/18/12		X	EPA 1312
Field Extraction	Completed			04/17/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-81 2-4 FT

Phoenix I.D.: BB73586

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/19/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/19/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/19/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/19/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/19/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	68		%	04/19/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/19/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/19/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	67		%	04/19/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	114		%	04/20/12		MH	30 - 150 %
% TCMX	96		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/19/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/19/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/19/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/19/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/19/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/19/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/19/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/19/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/19/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/19/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/19/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/19/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/19/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/19/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/19/12		MR	SW8081
QA/QC Surrogates							
% DCBP	86		%	04/19/12		MR	30 - 150 %
% TCMX	90		%	04/19/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	120	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	04/19/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.8	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	94		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	99		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	99		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/19/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-81 2-4 FT

Phoenix I.D.: BB73586

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/19/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/19/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/19/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	04/19/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/19/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/19/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	04/19/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Aniline	ND	990	ug/Kg	04/19/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/19/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/19/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	04/19/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/19/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/19/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	04/19/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/19/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/19/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/19/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/19/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-81 2-4 FT

Phoenix I.D.: BB73586

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/19/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/19/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/19/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/19/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/19/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/19/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	98		%	04/19/12		DD	15 - 130 %
% 2-Fluorobiphenyl	67		%	04/19/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/19/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/19/12		DD	15 - 130 %
% Phenol-d5	70		%	04/19/12		DD	15 - 130 %
% Terphenyl-d14	94		%	04/19/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 30, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/17/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/18/12	13:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB73578
Phoenix ID: BB73587

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-6

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			04/17/12		CK	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-6

Phoenix I.D.: BB73587

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	97		%	04/19/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-6

Phoenix I.D.: BB73587

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	101		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	96		%	04/19/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 30, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 30, 2012

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198603, QC Sample No: BB54292 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.033	0.042	24.0	91.6	93.6	2.2	95.9	95.2	0.7	75 - 125	20	r
Barium	BDL	0.079	0.120	41.2	97.3	98.2	0.9	101	102	1.0	75 - 125	20	r
Cadmium	BDL	<0.005	<0.005	NC	91.2	93.4	2.4	94.4	94.2	0.2	75 - 125	20	
Chromium	BDL	0.010	0.013	NC	95.8	98.0	2.3	100	99.3	0.7	75 - 125	20	
Lead	BDL	0.462	0.699	40.8	94.8	97.5	2.8	101	106	4.8	75 - 125	20	r
Selenium	BDL	<0.020	<0.020	NC	95.6	99.2	3.7	100	98.9	1.1	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	92.9	94.3	1.5	97.1	95.9	1.2	75 - 125	20	
QA/QC Batch 198709, QC Sample No: BB73576 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	89.1			92.5	92.2	0.3	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 198697, QC Sample No: BB73578 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)													
Mercury - Soil	BDL	<0.07	<0.07	NC	99.3	91.7	8.0	99.4	91.4	8.4	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 198668, QC Sample No: BB73580 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)													
ICP Metals - Soil													
Arsenic	BDL	3.02	3.54	NC	90.9	97.6	7.1	89.5	90.3	0.9	75 - 125	30	
Barium	BDL	31.6	23.5	29.4	94.3	101	6.9	90.6	92.8	2.4	75 - 125	30	
Cadmium	BDL	<0.32	<0.37	NC	92.4	97.2	5.1	91.1	92.2	1.2	75 - 125	30	
Chromium	BDL	8.38	10.2	19.6	97.4	105	7.5	96.4	98.3	2.0	75 - 125	30	
Lead	BDL	9.61	9.84	2.40	94.4	102	7.7	93.8	94.1	0.3	75 - 125	30	
Selenium	BDL	<1.3	<1.5	NC	90.0	94.6	5.0	87.6	87.1	0.6	75 - 125	30	
Silver	BDL	<0.32	<0.37	NC	89.0	95.1	6.6	88.0	89.8	2.0	75 - 125	30	

r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 30, 2012

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198554, QC Sample No: BB72484 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	84	85	1.2	90	70	25.0	40 - 140	30	
2,4,5-TP (Silvex)	ND	84	84	0.0	77	70	9.5	40 - 140	30	
2,4-D	ND	91	89	2.2	85	87	2.3	40 - 140	30	
2,4-DB	ND	80	84	4.9	98	84	15.4	40 - 140	30	
Dalapon	ND	73	82	11.6	49	54	9.7	40 - 140	30	
Dicamba	ND	84	84	0.0	69	64	7.5	40 - 140	30	
Dichloroprop	ND	72	70	2.8	70	67	4.4	40 - 140	30	
Dinoseb	ND	52	46	12.2	27	22	20.4	40 - 140	30	m
% DCAA (Surrogate Rec)	72	68	67	1.5	59	54	8.8	30 - 150	30	
QA/QC Batch 198838, QC Sample No: BB73149 (BB73578, BB73579, BB73580)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	95	103	8.1	89	91	2.2	70 - 130	30	
1,1,1-Trichloroethane	ND	89	120	29.7	111	115	3.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	96	5.3	106	96	9.9	70 - 130	30	
1,1,2-Trichloroethane	ND	92	101	9.3	88	89	1.1	70 - 130	30	
1,1-Dichloroethane	ND	86	117	30.5	85	110	25.6	70 - 130	30	
1,1-Dichloroethene	ND	102	106	3.8	104	104	0.0	70 - 130	30	
1,1-Dichloropropene	ND	102	113	10.2	103	104	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	100	106	5.8	87	89	2.3	70 - 130	30	
1,2,3-Trichloropropane	ND	102	103	1.0	96	84	13.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	95	104	9.0	89	92	3.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	99	106	6.8	43	43	0.0	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	103	108	4.7	95	87	8.8	70 - 130	30	
1,2-Dichlorobenzene	ND	90	100	10.5	62	59	5.0	70 - 130	30	m
1,2-Dichloroethane	ND	93	100	7.3	89	90	1.1	70 - 130	30	
1,2-Dichloropropane	ND	94	102	8.2	90	92	2.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	103	109	5.7	79	74	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	93	102	9.2	93	94	1.1	70 - 130	30	
1,3-Dichloropropane	ND	93	100	7.3	87	88	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	91	101	10.4	92	94	2.2	70 - 130	30	
2,2-Dichloropropane	ND	89	125	33.6	89	119	28.8	70 - 130	30	r
2-Chlorotoluene	ND	97	103	6.0	74	70	5.6	70 - 130	30	
2-Hexanone	ND	95	91	4.3	59	55	7.0	70 - 130	30	m
2-Isopropyltoluene	ND	97	107	9.8	69	67	2.9	70 - 130	30	m
4-Chlorotoluene	ND	94	101	7.2	79	77	2.6	70 - 130	30	
4-Methyl-2-pentanone	ND	96	98	2.1	91	86	5.6	70 - 130	30	
Acetone	ND	104	95	9.0	56	55	1.8	70 - 130	30	m
Acrylonitrile	ND	92	105	13.2	84	90	6.9	70 - 130	30	
Benzene	ND	97	105	7.9	83	86	3.6	70 - 130	30	
Bromobenzene	ND	94	102	8.2	79	76	3.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromochloromethane	ND	83	109	27.1	83	102	20.5	70 - 130	30	
Bromodichloromethane	ND	95	104	9.0	90	94	4.3	70 - 130	30	
Bromoform	ND	93	103	10.2	84	87	3.5	70 - 130	30	
Bromomethane	ND	97	114	16.1	96	109	12.7	70 - 130	30	
Carbon Disulfide	ND	98	107	8.8	99	101	2.0	70 - 130	30	
Carbon tetrachloride	ND	90	124	31.8	103	113	9.3	70 - 130	30	r
Chlorobenzene	ND	93	102	9.2	85	88	3.5	70 - 130	30	
Chloroethane	ND	93	115	21.2	72	112	43.5	70 - 130	30	r
Chloroform	ND	86	117	30.5	83	109	27.1	70 - 130	30	
Chloromethane	ND	105	112	6.5	103	105	1.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	113	26.0	84	105	22.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	93	102	9.2	90	91	1.1	70 - 130	30	
Dibromochloromethane	ND	95	102	7.1	88	90	2.2	70 - 130	30	
Dibromoethane	ND	93	101	8.2	89	88	1.1	70 - 130	30	
Dibromomethane	ND	93	100	7.3	89	87	2.3	70 - 130	30	
Dichlorodifluoromethane	ND	104	125	18.3	111	132	17.3	70 - 130	30	m
Ethylbenzene	ND	98	107	8.8	80	79	1.3	70 - 130	30	
Hexachlorobutadiene	ND	102	111	8.5	92	94	2.2	70 - 130	30	
Isopropylbenzene	ND	100	107	6.8	80	72	10.5	70 - 130	30	
m&p-Xylene	ND	96	106	9.9	62	63	1.6	70 - 130	30	m
Methyl ethyl ketone	ND	92	97	5.3	60	59	1.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	89	95	6.5	90	91	1.1	70 - 130	30	
Methylene chloride	ND	89	97	8.6	88	92	4.4	70 - 130	30	
Naphthalene	ND	103	105	1.9	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	104	117	11.8	85	78	8.6	70 - 130	30	
n-Propylbenzene	ND	97	105	7.9	85	79	7.3	70 - 130	30	
o-Xylene	ND	93	104	11.2	71	71	0.0	70 - 130	30	
p-Isopropyltoluene	ND	105	116	10.0	87	85	2.3	70 - 130	30	
sec-Butylbenzene	ND	100	110	9.5	86	79	8.5	70 - 130	30	
Styrene	ND	92	102	10.3	61	65	6.3	70 - 130	30	m
tert-Butylbenzene	ND	98	108	9.7	85	78	8.6	70 - 130	30	
Tetrachloroethene	ND	102	110	7.5	99	100	1.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	86	108	22.7	93	92	1.1	70 - 130	30	
Toluene	ND	98	107	8.8	81	85	4.8	70 - 130	30	
trans-1,2-Dichloroethene	ND	98	106	7.8	99	102	3.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	95	103	8.1	90	92	2.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	99	102	3.0	88	79	10.8	70 - 130	30	
Trichloroethene	ND	101	109	7.6	88	90	2.2	70 - 130	30	
Trichlorofluoromethane	ND	119	129	8.1	106	108	1.9	70 - 130	30	
Trichlorotrifluoroethane	ND	103	114	10.1	108	110	1.8	70 - 130	30	
Vinyl chloride	ND	99	117	16.7	99	111	11.4	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	101	100	1.0	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	98	98	101	3.0	99	105	5.9	70 - 130	30	
% Dibromofluoromethane	97	94	101	7.2	103	105	1.9	70 - 130	30	
% Toluene-d8	99	98	100	2.0	99	101	2.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198651, QC Sample No: BB73581 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

Pesticides - Soil

4,4' -DDD	ND	79	80	1.3	86	90	4.5	40 - 140	30	
4,4' -DDE	ND	82	83	1.2	87	88	1.1	40 - 140	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDT	ND	78	79	1.3	83	86	3.6	40 - 140	30
a-BHC	ND	87	86	1.2	92	92	0.0	40 - 140	30
a-Chlordane	ND	79	80	1.3	83	83	0.0	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	82	83	1.2	87	88	1.1	40 - 140	30
b-BHC	ND	81	81	0.0	88	89	1.1	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	83	84	1.2	90	91	1.1	40 - 140	30
Dieldrin	ND	83	84	1.2	88	89	1.1	40 - 140	30
Endosulfan I	ND	77	79	2.6	83	83	0.0	40 - 140	30
Endosulfan II	ND	68	73	7.1	84	83	1.2	40 - 140	30
Endosulfan sulfate	ND	70	72	2.8	81	81	0.0	40 - 140	30
Endrin	ND	81	81	0.0	87	87	0.0	40 - 140	30
Endrin aldehyde	ND	65	69	6.0	91	91	0.0	40 - 140	30
Endrin ketone	ND	78	82	5.0	87	90	3.4	40 - 140	30
g-BHC	ND	86	85	1.2	92	92	0.0	40 - 140	30
g-Chlordane	ND	81	81	0.0	85	85	0.0	40 - 140	30
Heptachlor	ND	78	77	1.3	80	79	1.3	40 - 140	30
Heptachlor epoxide	ND	82	83	1.2	87	87	0.0	40 - 140	30
Methoxychlor	ND	73	73	0.0	87	99	12.9	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	77	70	67	4.4	74	82	10.3	30 - 150	30
% TCMX	86	81	78	3.8	81	81	0.0	30 - 150	30

QA/QC Batch 198650, QC Sample No: BB73581 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	81	96	16.9	96	91	5.3	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	85	101	17.2	104	100	3.9	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	98	81	94	14.9	96	93	3.2	30 - 150	30
% TCMX (Surrogate Rec)	91	69	80	14.8	78	78	0.0	30 - 150	30

QA/QC Batch 198653, QC Sample No: BB73581 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	74	84	12.7	58	68	15.9	50 - 150	30
% n-Pentacosane	100	88	98	10.8	71	84	16.8	50 - 150	30

QA/QC Batch 198652, QC Sample No: BB73581 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	38	41	7.6	43	43	0.0	30 - 130	30
1,2,4-Trichlorobenzene	ND	59	64	8.1	67	69	2.9	30 - 130	30
1,2-Dichlorobenzene	ND	58	61	5.0	63	65	3.1	30 - 130	30
1,3-Dichlorobenzene	ND	56	60	6.9	62	65	4.7	30 - 130	30
1,4-Dichlorobenzene	ND	57	61	6.8	63	64	1.6	30 - 130	30
2,4,5-Trichlorophenol	ND	72	71	1.4	78	81	3.8	30 - 130	30
2,4,6-Trichlorophenol	ND	70	68	2.9	75	78	3.9	30 - 130	30

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dichlorophenol	ND	69	71	2.9	76	77	1.3	30 - 130	30	
2,4-Dimethylphenol	ND	48	51	6.1	59	62	5.0	30 - 130	30	
2,4-Dinitrophenol	ND	28	<5	NC	8.5	11	25.6	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	71	70	1.4	73	78	6.6	30 - 130	30	
2,6-Dinitrotoluene	ND	71	70	1.4	75	79	5.2	30 - 130	30	
2-Chloronaphthalene	ND	66	67	1.5	72	74	2.7	30 - 130	30	
2-Chlorophenol	ND	63	65	3.1	67	70	4.4	30 - 130	30	
2-Methylnaphthalene	ND	63	65	3.1	70	71	1.4	30 - 130	30	
2-Methylphenol (o-cresol)	ND	64	65	1.6	70	73	4.2	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	70	70	0.0	78	81	3.8	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	63	64	1.6	68	70	2.9	30 - 130	30	
3,3'-Dichlorobenzidine	ND	47	49	4.2	52	52	0.0	30 - 130	30	
3-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4,6-Dinitro-2-methylphenol	ND	67	37	57.7	72	74	2.7	30 - 130	30	r
4-Bromophenyl phenyl ether	ND	70	72	2.8	74	79	6.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	73	74	1.4	80	82	2.5	30 - 130	30	
4-Chloroaniline	ND	98	106	7.8	104	102	1.9	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	70	71	1.4	76	79	3.9	30 - 130	30	
4-Nitroaniline	ND	70	71	1.4	76	77	1.3	30 - 130	30	
4-Nitrophenol	ND	76	68	11.1	80	85	6.1	30 - 130	30	
Acenaphthene	ND	68	69	1.5	72	75	4.1	30 - 130	30	
Acenaphthylene	ND	66	67	1.5	71	75	5.5	30 - 130	30	
Acetophenone	ND	31	33	6.3	34	35	2.9	30 - 130	30	
Aniline	ND	31	34	9.2	32	32	0.0	30 - 130	30	
Anthracene	ND	71	73	2.8	75	82	8.9	30 - 130	30	
Azobenzene	ND	34	35	2.9	36	38	5.4	30 - 130	30	
Benz(a)anthracene	ND	72	72	0.0	78	90	14.3	30 - 130	30	
Benzidine	ND	44	48	8.7	37	31	17.6	30 - 130	30	
Benzo(a)pyrene	ND	68	69	1.5	72	80	10.5	30 - 130	30	
Benzo(b)fluoranthene	ND	71	76	6.8	68	81	17.4	30 - 130	30	
Benzo(ghi)perylene	ND	71	71	0.0	77	84	8.7	30 - 130	30	
Benzo(k)fluoranthene	ND	77	71	8.1	81	85	4.8	30 - 130	30	
Benzyl butyl phthalate	ND	69	69	0.0	74	79	6.5	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	65	67	3.0	71	72	1.4	30 - 130	30	
Bis(2-chloroethyl)ether	ND	59	62	5.0	65	68	4.5	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	57	59	3.4	61	63	3.2	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	72	73	1.4	77	82	6.3	30 - 130	30	
Carbazole	ND	91	90	1.1	95	101	6.1	30 - 130	30	
Chrysene	ND	71	71	0.0	70	81	14.6	30 - 130	30	
Dibenz(a,h)anthracene	ND	73	73	0.0	79	84	6.1	30 - 130	30	
Dibenzofuran	ND	68	69	1.5	72	76	5.4	30 - 130	30	
Diethyl phthalate	ND	72	72	0.0	75	78	3.9	30 - 130	30	
Dimethylphthalate	ND	71	72	1.4	76	79	3.9	30 - 130	30	
Di-n-butylphthalate	ND	69	70	1.4	73	75	2.7	30 - 130	30	
Di-n-octylphthalate	ND	73	73	0.0	75	78	3.9	30 - 130	30	
Fluoranthene	ND	70	73	4.2	64	86	29.3	30 - 130	30	
Fluorene	ND	70	70	0.0	74	77	4.0	30 - 130	30	
Hexachlorobenzene	ND	70	71	1.4	72	75	4.1	30 - 130	30	
Hexachlorobutadiene	ND	64	68	6.1	71	74	4.1	30 - 130	30	
Hexachlorocyclopentadiene	ND	61	67	9.4	69	67	2.9	30 - 130	30	
Hexachloroethane	ND	59	63	6.6	65	67	3.0	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	71	71	0.0	78	84	7.4	30 - 130	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Isophorone	ND	64	66	3.1	71	73	2.8	30 - 130	30	
Naphthalene	ND	61	65	6.3	69	69	0.0	30 - 130	30	
Nitrobenzene	ND	62	64	3.2	66	69	4.4	30 - 130	30	
N-Nitrosodimethylamine	ND	54	53	1.9	57	55	3.6	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	63	65	3.1	67	70	4.4	30 - 130	30	
N-Nitrosodiphenylamine	ND	77	77	0.0	81	85	4.8	30 - 130	30	
Pentachloronitrobenzene	ND	79	81	2.5	83	89	7.0	30 - 130	30	
Pentachlorophenol	ND	70	53	27.6	78	84	7.4	30 - 130	30	
Phenanthrene	ND	71	73	2.8	76	90	16.9	30 - 130	30	
Phenol	ND	63	65	3.1	67	71	5.8	30 - 130	30	
Pyrene	ND	73	73	0.0	69	87	23.1	30 - 130	30	
Pyridine	ND	24	23	4.3	25	24	4.1	30 - 130	30	l,m
% 2,4,6-Tribromophenol	81	72	72	0.0	79	80	1.3	15 - 130	30	
% 2-Fluorobiphenyl	68	62	64	3.2	69	71	2.9	30 - 130	30	
% 2-Fluorophenol	71	59	61	3.3	65	67	3.0	15 - 130	30	
% Nitrobenzene-d5	72	60	63	4.9	66	69	4.4	30 - 130	30	
% Phenol-d5	69	58	60	3.4	64	67	4.6	15 - 130	30	
% Terphenyl-d14	97	84	85	1.2	91	94	3.2	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198839, QC Sample No: BB73737 (BB73581, BB73582, BB73584, BB73585, BB73586, BB73587)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	89	99	10.6				70 - 130	30	
1,1,1-Trichloroethane	ND	94	121	25.1				70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	89	97	8.6				70 - 130	30	
1,1,2-Trichloroethane	ND	94	100	6.2				70 - 130	30	
1,1-Dichloroethane	ND	89	116	26.3				70 - 130	30	
1,1-Dichloroethene	ND	102	109	6.6				70 - 130	30	
1,1-Dichloropropene	ND	103	116	11.9				70 - 130	30	
1,2,3-Trichlorobenzene	ND	92	98	6.3				70 - 130	30	
1,2,3-Trichloropropane	ND	100	103	3.0				70 - 130	30	
1,2,4-Trichlorobenzene	ND	85	92	7.9				70 - 130	30	
1,2,4-Trimethylbenzene	ND	95	102	7.1				70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	101	114	12.1				70 - 130	30	
1,2-Dichlorobenzene	ND	86	96	11.0				70 - 130	30	
1,2-Dichloroethane	ND	94	101	7.2				70 - 130	30	
1,2-Dichloropropane	ND	94	100	6.2				70 - 130	30	
1,3,5-Trimethylbenzene	ND	99	107	7.8				70 - 130	30	
1,3-Dichlorobenzene	ND	88	97	9.7				70 - 130	30	
1,3-Dichloropropane	ND	93	99	6.3				70 - 130	30	
1,4-Dichlorobenzene	ND	85	93	9.0				70 - 130	30	
2,2-Dichloropropane	ND	89	119	28.8				70 - 130	30	
2-Chlorotoluene	ND	93	101	8.2				70 - 130	30	
2-Hexanone	ND	93	95	2.1				70 - 130	30	
2-Isopropyltoluene	ND	94	104	10.1				70 - 130	30	
4-Chlorotoluene	ND	88	96	8.7				70 - 130	30	
4-Methyl-2-pentanone	ND	97	99	2.0				70 - 130	30	
Acetone	ND	98	103	5.0				70 - 130	30	
Acrylonitrile	ND	91	111	19.8				70 - 130	30	
Benzene	ND	97	105	7.9				70 - 130	30	
Bromobenzene	ND	91	100	9.4				70 - 130	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromochloromethane	ND	87	112	25.1				70 - 130	30	
Bromodichloromethane	ND	92	100	8.3				70 - 130	30	
Bromoform	ND	87	98	11.9				70 - 130	30	
Bromomethane	ND	98	114	15.1				70 - 130	30	
Carbon Disulfide	ND	98	105	6.9				70 - 130	30	
Carbon tetrachloride	ND	87	123	34.3				70 - 130	30	r
Chlorobenzene	ND	89	101	12.6				70 - 130	30	
Chloroethane	ND	97	117	18.7				70 - 130	30	
Chloroform	ND	88	117	28.3				70 - 130	30	
Chloromethane	ND	104	112	7.4				70 - 130	30	
cis-1,2-Dichloroethene	ND	88	113	24.9				70 - 130	30	
cis-1,3-Dichloropropene	ND	92	98	6.3				70 - 130	30	
Dibromochloromethane	ND	88	98	10.8				70 - 130	30	
Dibromoethane	ND	93	102	9.2				70 - 130	30	
Dibromomethane	ND	94	101	7.2				70 - 130	30	
Dichlorodifluoromethane	ND	98	125	24.2				70 - 130	30	
Ethylbenzene	ND	93	106	13.1				70 - 130	30	
Hexachlorobutadiene	ND	95	103	8.1				70 - 130	30	
Isopropylbenzene	ND	97	107	9.8				70 - 130	30	
m&p-Xylene	ND	92	104	12.2				70 - 130	30	
Methyl ethyl ketone	ND	97	106	8.9				70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	92	95	3.2				70 - 130	30	
Methylene chloride	ND	92	96	4.3				70 - 130	30	
Naphthalene	ND	101	107	5.8				70 - 130	30	
n-Butylbenzene	ND	99	108	8.7				70 - 130	30	
n-Propylbenzene	ND	91	103	12.4				70 - 130	30	
o-Xylene	ND	89	100	11.6				70 - 130	30	
p-Isopropyltoluene	ND	100	111	10.4				70 - 130	30	
sec-Butylbenzene	ND	96	108	11.8				70 - 130	30	
Styrene	ND	88	99	11.8				70 - 130	30	
tert-Butylbenzene	ND	96	107	10.8				70 - 130	30	
Tetrachloroethene	ND	97	105	7.9				70 - 130	30	
Tetrahydrofuran (THF)	ND	89	110	21.1				70 - 130	30	
Toluene	ND	97	105	7.9				70 - 130	30	
trans-1,2-Dichloroethene	ND	101	106	4.8				70 - 130	30	
trans-1,3-Dichloropropene	ND	91	99	8.4				70 - 130	30	
trans-1,4-dichloro-2-butene	ND	90	100	10.5				70 - 130	30	
Trichloroethene	ND	100	108	7.7				70 - 130	30	
Trichlorofluoromethane	ND	125	133	6.2				70 - 130	30	l
Trichlorotrifluoroethane	ND	106	115	8.1				70 - 130	30	
Vinyl chloride	ND	102	118	14.5				70 - 130	30	
% 1,2-dichlorobenzene-d4	100	102	103	1.0				70 - 130	30	
% Bromofluorobenzene	100	99	101	2.0				70 - 130	30	
% Dibromofluoromethane	99	103	102	1.0				70 - 130	30	
% Toluene-d8	99	101	101	0.0				70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199065, QC Sample No: BB73743 (BB73583)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	107	106	0.9	102	101	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	116	110	5.3	97	106	8.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	115	106	8.1	108	101	6.7	70 - 130	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,2-Trichloroethane	ND	106	103	2.9	100	98	2.0	70 - 130	30	
1,1-Dichloroethane	ND	100	109	8.6	99	108	8.7	70 - 130	30	
1,1-Dichloroethene	ND	103	102	1.0	99	88	11.8	70 - 130	30	
1,1-Dichloropropene	ND	105	107	1.9	101	105	3.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	130	123	5.5	114	109	4.5	70 - 130	30	
1,2,3-Trichloropropane	ND	121	109	10.4	108	98	9.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	132	129	2.3	121	121	0.0	70 - 130	30	l
1,2,4-Trimethylbenzene	ND	115	115	0.0	112	111	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	116	106	9.0	98	91	7.4	70 - 130	30	
1,2-Dichlorobenzene	ND	109	108	0.9	105	105	0.0	70 - 130	30	
1,2-Dichloroethane	ND	103	99	4.0	100	97	3.0	70 - 130	30	
1,2-Dichloropropane	ND	104	103	1.0	101	99	2.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	116	116	0.0	111	108	2.7	70 - 130	30	
1,3-Dichlorobenzene	ND	110	112	1.8	108	109	0.9	70 - 130	30	
1,3-Dichloropropane	ND	109	101	7.6	102	98	4.0	70 - 130	30	
1,4-Dichlorobenzene	ND	111	113	1.8	110	110	0.0	70 - 130	30	
2,2-Dichloropropane	ND	106	120	12.4	100	112	11.3	70 - 130	30	
2-Chlorotoluene	ND	109	112	2.7	108	109	0.9	70 - 130	30	
2-Hexanone	ND	93	85	9.0	57	55	3.6	70 - 130	30	m
2-Isopropyltoluene	ND	109	110	0.9	107	108	0.9	70 - 130	30	
4-Chlorotoluene	ND	109	109	0.0	111	112	0.9	70 - 130	30	
4-Methyl-2-pentanone	ND	104	95	9.0	94	85	10.1	70 - 130	30	
Acetone	ND	115	99	15.0	42	<40	NC	70 - 130	30	m
Acrylonitrile	ND	112	102	9.3	110	105	4.7	70 - 130	30	
Benzene	ND	103	101	2.0	102	99	3.0	70 - 130	30	
Bromobenzene	ND	111	111	0.0	106	106	0.0	70 - 130	30	
Bromochloromethane	ND	105	108	2.8	100	107	6.8	70 - 130	30	
Bromodichloromethane	ND	104	105	1.0	100	100	0.0	70 - 130	30	
Bromoform	ND	106	104	1.9	93	94	1.1	70 - 130	30	
Bromomethane	ND	96	108	11.8	45	62	31.8	70 - 130	30	m,r
Carbon Disulfide	ND	103	101	2.0	98	87	11.9	70 - 130	30	
Carbon tetrachloride	ND	102	109	6.6	94	102	8.2	70 - 130	30	
Chlorobenzene	ND	103	103	0.0	101	103	2.0	70 - 130	30	
Chloroethane	ND	109	110	0.9	<40	<40	NC	70 - 130	30	m
Chloroform	ND	101	113	11.2	100	107	6.8	70 - 130	30	
Chloromethane	ND	109	102	6.6	99	93	6.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	103	108	4.7	101	106	4.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	107	107	0.0	104	101	2.9	70 - 130	30	
Dibromochloromethane	ND	107	104	2.8	98	98	0.0	70 - 130	30	
Dibromoethane	ND	106	102	3.8	99	97	2.0	70 - 130	30	
Dibromomethane	ND	108	105	2.8	102	100	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	89	112	22.9	51	99	64.0	70 - 130	30	m,r
Ethylbenzene	ND	105	107	1.9	102	105	2.9	70 - 130	30	
Hexachlorobutadiene	ND	117	118	0.9	112	116	3.5	70 - 130	30	
Isopropylbenzene	ND	104	106	1.9	103	104	1.0	70 - 130	30	
m&p-Xylene	ND	106	107	0.9	103	105	1.9	70 - 130	30	
Methyl ethyl ketone	ND	117	103	12.7	61	54	12.2	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	98	95	3.1	103	94	9.1	70 - 130	30	
Methylene chloride	ND	105	105	0.0	101	99	2.0	70 - 130	30	
Naphthalene	ND	127	114	10.8	109	100	8.6	70 - 130	30	
n-Butylbenzene	ND	120	126	4.9	116	119	2.6	70 - 130	30	
n-Propylbenzene	ND	105	108	2.8	111	112	0.9	70 - 130	30	
o-Xylene	ND	104	106	1.9	103	106	2.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB73578

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
p-Isopropyltoluene	ND	117	121	3.4	111	112	0.9	70 - 130	30	
sec-Butylbenzene	ND	107	111	3.7	107	109	1.9	70 - 130	30	
Styrene	ND	107	109	1.9	106	108	1.9	70 - 130	30	
tert-Butylbenzene	ND	106	107	0.9	104	106	1.9	70 - 130	30	
Tetrachloroethene	ND	105	103	1.9	102	102	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	113	100	12.2	96	95	1.0	70 - 130	30	
Toluene	ND	105	107	1.9	102	102	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	106	104	1.9	106	101	4.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	112	111	0.9	107	103	3.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	123	116	5.9	104	99	4.9	70 - 130	30	
Trichloroethene	ND	98	98	0.0	94	94	0.0	70 - 130	30	
Trichlorofluoromethane	ND	122	125	2.4	<40	45	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	103	104	1.0	99	89	10.6	70 - 130	30	
Vinyl chloride	ND	109	110	0.9	65	108	49.7	70 - 130	30	m,r
% 1,2-dichlorobenzene-d4	100	101	101	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	96	96	101	5.1	97	100	3.0	70 - 130	30	
% Dibromofluoromethane	109	104	99	4.9	103	99	4.0	70 - 130	30	
% Toluene-d8	96	98	100	2.0	99	102	3.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 30, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB73578

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB73578	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB73579	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB73580	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB73581	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB73582	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB73583	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB73584	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB73585	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB73586	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586, BB73587, BB73588

Sampling Date(s): 4/17/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Monday, April 30, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine reporting level does not meet GBPM criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 04/19/12-1 (BB73586)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/19/2012

Instrument: Au-fid1 04/19/12-2 (BB73579, BB73580)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/19/2012

Instrument: Au-fid1 04/23/12-1 (BB73578)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/23/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

Instrument: Au-fid1 04/24/12-1 (BB73583)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/24/2012

Instrument: Au-fid84 04/19/12-1 (BB73581, BB73582, BB73584, BB73585)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/19/2012

QC (Site Specific)

---------- Sample No: BB73581, QA/QC Batch: 198653 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 04/19/12-1 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

Initial Calibration ECD14-041812

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/19/2012

QC (Batch Specific)

---------- Sample No: BB72484, QA/QC Batch: 198554 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/19/12-1 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/19/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

QC (Site Specific)

---------- Sample No: BB73578, QA/QC Batch: 198697 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB73576, QA/QC Batch: 198709 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp7 04/19/12-1 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/19/2012

Instrument: Icp9 04/19/12-1 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

Printed Name Laura Kinnin
Position: Chemist
Date: 4/19/2012

Instrument: Icp9 04/20/12-1 (BB73578, BB73579, BB73580, BB73581, BB73584, BB73586)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/20/2012

QC (Site Specific)

---------- Sample No: BB73580, QA/QC Batch: 198668 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB54292, QA/QC Batch: 198603 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd35 04/20/12-1 (BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/20/2012

Instrument: Au-ecd7 04/23/12-1 (BB73578)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/23/2012

Instrument: Au-ecd8 04/23/12-1 (BB73581)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/23/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

QC (Site Specific)

---------- Sample No: BB73581, QA/QC Batch: 198650 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 40 - 140 with the following exceptions: None.

All MSD recoveries were within 40 - 140 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/19/12-1 (BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Mark Rochette
Position: Chemist
Date: 4/19/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

QC (Site Specific)

---------- Sample No: BB73581, QA/QC Batch: 198651 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198652 (Samples: BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586): ----

The LCS and/or LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pyridine)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline)

The MS and/or MSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The MS and/or MSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

Instrument: Chem09 04/18/12-1 (BB73581)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0418):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

had RSDs >20% and <0.99 correlation coefficient: 3-nitroaniline

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: 3-Nitroaniline

Printed Name Damien Drobinski
Position: Chemist
Date: 4/18/2012

Instrument: Chem12 04/18/12-2 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0417):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene, % 2,4,6-tribromophenol

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzyl Alcohol, Hexachlorocyclopentadiene, 4-Nitrophenol, 2-Nitroaniline, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 4/18/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

QC (Site Specific)

---------- Sample No: BB73581, QA/QC Batch: 198652 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(28%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(24%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(23%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(57.7%)

All MS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(8.5%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(25%)

All MSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(11%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(24%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198838 (Samples: BB73578, BB73579, BB73580): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

QC Batch 198839 (Samples: BB73581, BB73582, BB73584, BB73585, BB73586, BB73587): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result.

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Trichlorofluoromethane)

QC Batch 199065 (Samples: BB73583): -----

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (1,2,4-Trichlorobenzene)

Instrument: Chem11 04/18/12-2 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73584, BB73585, BB73586, BB73587)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Dichlorodifluoromethane

Printed Name Johanna Harrington
Position: Chemist
Date: 4/18/2012

Instrument: Chem11 04/18/12-3 (BB73578, BB73579, BB73580, BB73581, BB73582, BB73583, BB73584, BB73585, BB73586, BB73587)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: None.

Printed Name Peter LaBarre
Position: Chemist
Date: 4/18/2012

Instrument: Chem11 04/20/12-2 (BB73583)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Acrolein, Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 4/20/2012

QC Comments: QC Batch 98839 04/20/12 (BB73581, BB73582, BB73584, BB73585, BB73586, BB73587)

The MS/MSD are not reported for this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 30, 2012

SDG I.D.: GBB73578

QC (Batch Specific)

---------- Sample No: BB73149, QA/QC Batch: 198838 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: 2,2-Dichloropropane(33.6%), Carbon tetrachloride(31.8%)

---------- Sample No: BB73737, QA/QC Batch: 198839 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Trichlorofluoromethane(133%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Carbon tetrachloride(34.3%)

---------- Sample No: BB73743, QA/QC Batch: 199065 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,4-Trichlorobenzene(132%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 2249141
Fax #: 860 2249147

Client Sample - Information - Identification

Sampler's Signature: Cody Yt Date: 4-17-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests. + PCBs 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
73578	GP-73 2'-4'	S	4-17-12	11:15am	X	X	X	X	X	X	X								3	2	
73579	GP-74 2'-4'			11:26am																	
73580	GP-75 2'-4'			11:41am																	
73581	GP-76 3'-5'			12:01pm																	
73582	GP-77 2'-4'			12:15pm																	
73583	GP-78 2'-4'			12:23pm																	
73584	GP-79 2'-4'			12:37pm																	
73585	GP-80 2'-4'			12:45pm																	
73586	GP-81 2'-4'			1:00pm																	
73587	TB-6 Low			-															2		
☆ 73588	TB-High																				

Relinquished by:	Accepted by:	Date:	Time:
Cody Yt	[illegible]	4/18/12	1025
[illegible]	Canadise	4/18/12	1358

Comments, Special Requirements or Regulations:

☆ did not receive TB High (MGP)

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 26, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH CATENARY PROJECT
Sample ID#s: BB74223 - BB74232

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	13:19
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74223

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-56 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	04/20/12		LK	6010
Arsenic	3.78	0.73	mg/Kg	04/20/12		LK	6010
Barium	24.3	0.36	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.36	0.36	mg/Kg	04/20/12		LK	6010
Chromium	10.3	0.36	mg/Kg	04/20/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/20/12		JA	SW-7471
Lead	9.80	0.36	mg/Kg	04/20/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/20/12		EK	6010
SPLP Barium	0.015	0.010	mg/L	04/20/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/20/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/20/12		JA	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/20/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/20/12		X/X	SW846-3005
Percent Solid	84		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-56 3-5 FT

Phoenix I.D.: BB74223

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	99	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	99	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	59		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	12	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	54		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	390	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	390	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	103		%	04/20/12		MH	30 - 150 %
% TCMX	78		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	37	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	37	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	19	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	5.8	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	58	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	5.8	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	19	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	37	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	37	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	37	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	37	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	37	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	5.8	ug/Kg	04/20/12		MR	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-56 3-5 FT

Phoenix I.D.: BB74223

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	19	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	190	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	190	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	71		%	04/20/12		MR	30 - 150 %
% TCMX	78		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	120	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-56 3-5 FT

Phoenix I.D.: BB74223

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Toluene	6.6	5.9	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	90		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	103		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	97		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	270	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-56 3-5 FT

Phoenix I.D.: BB74223

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	620	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	620	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	270	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	620	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	270	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	460	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	580	ug/Kg	04/20/12		DD	SW 8270
Chrysene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	270	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	270	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	270	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	270	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-56 3-5 FT

Phoenix I.D.: BB74223

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	390	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	270	ug/Kg	04/20/12		DD	SW 8270
Pyrene	ND	270	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	390	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	106		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/20/12		DD	15 - 130 %
% Phenol-d5	75		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/20/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	13:00
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74224

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-57 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	04/20/12		LK	6010
Arsenic	3.49	0.82	mg/Kg	04/20/12		LK	6010
Barium	56.2	0.41	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.41	0.41	mg/Kg	04/20/12		LK	6010
Chromium	15.0	0.41	mg/Kg	04/20/12		LK	6010
Mercury	< 0.09	0.09	mg/Kg	04/20/12		JA	SW-7471
Lead	10.9	0.41	mg/Kg	04/20/12		LK	6010
Selenium	< 1.6	1.6	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Arsenic	0.018	0.004	mg/L	04/20/12		EK	6010
SPLP Barium	0.144	0.010	mg/L	04/20/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/20/12		EK	6010
SPLP Chromium	0.049	0.010	mg/L	04/20/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/20/12		JA	1312/SW7470
SPLP Lead	0.053	0.010	mg/L	04/20/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/20/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/20/12		X/X	SW846-3005
Percent Solid	82		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-57 3-5 FT

Phoenix I.D.: BB74224

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	67		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	12	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	79		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	100		%	04/20/12		MH	30 - 150 %
% TCMX	74		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	38	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	38	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	19	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.0	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	60	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.0	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	19	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	38	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	38	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.0	ug/Kg	04/20/12		MR	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-57 3-5 FT

Phoenix I.D.: BB74224

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	19	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	190	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	190	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	77		%	04/20/12		MR	30 - 150 %
% TCMX	78		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.9	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	33	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	130	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.9	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-57 3-5 FT

Phoenix I.D.: BB74224

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	39	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	04/20/12		H/J	SW8260
Toluene	8.6	6.5	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	6.5	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	91		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	93		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	99		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	630	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-57 3-5 FT

Phoenix I.D.: BB74224

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	280	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	470	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	590	ug/Kg	04/20/12		DD	SW 8270
Chrysene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	280	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	280	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	280	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-57 3-5 FT

Phoenix I.D.: BB74224

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	390	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
Pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	390	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	113		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	66		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/20/12		DD	15 - 130 %
% Phenol-d5	77		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/20/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	12:42
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74225

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-58 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.45	0.45	mg/Kg	04/20/12		LK	6010
Arsenic	5.79	0.90	mg/Kg	04/20/12		LK	6010
Barium	44.0	0.45	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.45	0.45	mg/Kg	04/20/12		LK	6010
Chromium	15.5	0.45	mg/Kg	04/20/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	04/20/12		JA	SW-7471
Lead	12.1	0.45	mg/Kg	04/20/12		LK	6010
Selenium	< 1.8	1.8	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/20/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/20/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/20/12		JA	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/20/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/20/12		X/X	SW846-3005
Percent Solid	79		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-58 3-5 FT

Phoenix I.D.: BB74225

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	52	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	52	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	52	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	520	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	52	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	52	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	79		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	12	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	77		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	94		%	04/20/12		MH	30 - 150 %
% TCMX	74		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	40	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	40	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	40	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	20	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.2	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	62	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.2	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	20	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	40	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	40	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.2	ug/Kg	04/20/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	20	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	200	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	200	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	62		%	04/20/12		MR	30 - 150 %
% TCMX	76		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.0	ug/Kg	04/20/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,1-Dichloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,1-Dichloroethene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,1-Dichloropropene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2-Dichloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,2-Dichloropropane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,3-Dichloropropane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
2,2-Dichloropropane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
2-Chlorotoluene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
2-Hexanone	ND	33	ug/Kg	04/20/12		R/J	SW8260
2-Isopropyltoluene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
4-Chlorotoluene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	04/20/12		R/J	SW8260
Acetone	ND	130	ug/Kg	04/20/12		R/J	SW8260
Acrylonitrile	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Benzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Bromobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Bromochloromethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Bromodichloromethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Bromoform	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Bromomethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Carbon Disulfide	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Carbon tetrachloride	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Chlorobenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Chloroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Chloroform	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Chloromethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Dibromochloromethane	ND	4.0	ug/Kg	04/20/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Dibromomethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Ethylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Hexachlorobutadiene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Isopropylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
m&p-Xylene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Methyl Ethyl Ketone	ND	40	ug/Kg	04/20/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	04/20/12		R/J	SW8260
Methylene chloride	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Naphthalene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
n-Butylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
n-Propylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
o-Xylene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
p-Isopropyltoluene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
sec-Butylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Styrene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
tert-Butylbenzene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Tetrachloroethene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	04/20/12		R/J	SW8260
Toluene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Total Xylenes	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	04/20/12		R/J	SW8260
Trichloroethene	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Trichlorofluoromethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
Vinyl chloride	ND	6.6	ug/Kg	04/20/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/20/12		R/J	70 - 130 %
% Bromofluorobenzene	91		%	04/20/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	04/20/12		R/J	70 - 130 %
% Toluene-d8	100		%	04/20/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-58 3-5 FT

Phoenix I.D.: BB74225

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	290	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	500	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	630	ug/Kg	04/20/12		DD	SW 8270
Chrysene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	290	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	290	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	290	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-58 3-5 FT

Phoenix I.D.: BB74225

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	420	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
Pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	420	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	100		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	73		%	04/20/12		DD	15 - 130 %
% Phenol-d5	69		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	86		%	04/20/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	12:21
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74226

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-59 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	04/20/12		LK	6010
Arsenic	3.41	0.75	mg/Kg	04/20/12		LK	6010
Barium	39.2	0.38	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.38	0.38	mg/Kg	04/20/12		LK	6010
Chromium	9.93	0.38	mg/Kg	04/20/12		LK	6010
Mercury	0.07	0.07	mg/Kg	04/20/12		JA	SW-7471
Lead	20.3	0.38	mg/Kg	04/20/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Arsenic	0.008	0.004	mg/L	04/20/12		EK	6010
SPLP Barium	0.177	0.010	mg/L	04/20/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/20/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/20/12		JA	1312/SW7470
SPLP Lead	0.079	0.010	mg/L	04/20/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/20/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/20/12		X/X	SW846-3005
Percent Solid	91		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-59 3-5 FT

Phoenix I.D.: BB74226

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	91	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	91	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	75		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	100	11	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	95		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	90		%	04/20/12		MH	30 - 150 %
% TCMX	68		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	5.4	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	54	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	5.4	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	5.4	ug/Kg	04/20/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	76		%	04/20/12		MR	30 - 150 %
% TCMX	70		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/20/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	92		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	102		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	97		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	580	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	510	250	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-59 3-5 FT

Phoenix I.D.: BB74226

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	580	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	580	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	360	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	580	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	1100	250	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Anthracene	520	250	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	360	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	1500	250	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	430	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	1400	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	2300	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	740	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	740	250	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	360	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	540	ug/Kg	04/20/12		DD	SW 8270
Chrysene	2300	250	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	2800	250	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	710	250	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	640	250	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	360	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-59 3-5 FT

Phoenix I.D.: BB74226

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	360	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	360	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	360	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	1500	250	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
Pyrene	3000	250	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	360	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	112		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	75		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	04/20/12		DD	15 - 130 %
% Phenol-d5	77		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	92		%	04/20/12		DD	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	11:57
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74227

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-60 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.44	0.44	mg/Kg	04/20/12		LK	6010
Arsenic	9.97	0.88	mg/Kg	04/20/12		LK	6010
Barium	203	0.44	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.44	0.44	mg/Kg	04/20/12		LK	6010
Chromium	18.3	0.44	mg/Kg	04/20/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	04/20/12		JA	SW-7471
Lead	85.3	0.44	mg/Kg	04/20/12		LK	6010
Selenium	< 1.8	1.8	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Arsenic	0.006	0.004	mg/L	04/20/12		EK	6010
SPLP Barium	0.091	0.010	mg/L	04/20/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/20/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/20/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/22/12		JA	1312/SW7470
SPLP Lead	0.061	0.010	mg/L	04/20/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/20/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/20/12		X/X	SW846-3005
Percent Solid	76		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-60 3-5 FT

Phoenix I.D.: BB74227

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	550	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	55	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	110	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	55	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	110	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	77		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	13	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	69		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	430	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	73		%	04/20/12		MH	30 - 150 %
% TCMX	36		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	42	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	42	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	42	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	21	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.5	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	65	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.5	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	21	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	42	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	42	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.5	ug/Kg	04/20/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	13	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	20	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	210	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	210	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	51		%	04/20/12		MR	30 - 150 %
% TCMX	35		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,1,1-Trichloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,1,2,2-Tetrachloroethane	ND	3	ug/Kg	04/21/12		H/P	SW8260
1,1,2-Trichloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,1-Dichloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,1-Dichloroethene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,1-Dichloropropene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2,3-Trichlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2,3-Trichloropropane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2,4-Trichlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2,4-Trimethylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2-Dibromo-3-chloropropane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2-Dichlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2-Dichloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,2-Dichloropropane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,3,5-Trimethylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,3-Dichlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,3-Dichloropropane	ND	5	ug/Kg	04/21/12		H/P	SW8260
1,4-Dichlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
2,2-Dichloropropane	ND	5	ug/Kg	04/21/12		H/P	SW8260
2-Chlorotoluene	ND	5	ug/Kg	04/21/12		H/P	SW8260
2-Hexanone	ND	25	ug/Kg	04/21/12		H/P	SW8260
2-Isopropyltoluene	ND	5	ug/Kg	04/21/12		H/P	SW8260
4-Chlorotoluene	ND	5	ug/Kg	04/21/12		H/P	SW8260
4-Methyl-2-pentanone	ND	25	ug/Kg	04/21/12		H/P	SW8260
Acetone	ND	100	ug/Kg	04/21/12		H/P	SW8260
Acrylonitrile	ND	5	ug/Kg	04/21/12		H/P	SW8260
Benzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Bromobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Bromochloromethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Bromodichloromethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Bromoform	ND	5	ug/Kg	04/21/12		H/P	SW8260
Bromomethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Carbon Disulfide	ND	5	ug/Kg	04/21/12		H/P	SW8260
Carbon tetrachloride	ND	5	ug/Kg	04/21/12		H/P	SW8260
Chlorobenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Chloroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Chloroform	ND	5	ug/Kg	04/21/12		H/P	SW8260
Chloromethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
cis-1,2-Dichloroethene	ND	5	ug/Kg	04/21/12		H/P	SW8260
cis-1,3-Dichloropropene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Dibromochloromethane	ND	3	ug/Kg	04/21/12		H/P	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-60 3-5 FT

Phoenix I.D.: BB74227

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Dibromomethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Dichlorodifluoromethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Ethylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Hexachlorobutadiene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Isopropylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
m&p-Xylene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/21/12		H/P	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/21/12		H/P	SW8260
Methylene chloride	ND	5	ug/Kg	04/21/12		H/P	SW8260
Naphthalene	ND	5	ug/Kg	04/21/12		H/P	SW8260
n-Butylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
n-Propylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
o-Xylene	ND	5	ug/Kg	04/21/12		H/P	SW8260
p-Isopropyltoluene	ND	5	ug/Kg	04/21/12		H/P	SW8260
sec-Butylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Styrene	ND	5	ug/Kg	04/21/12		H/P	SW8260
tert-Butylbenzene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Tetrachloroethene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/21/12		H/P	SW8260
Toluene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Total Xylenes	ND	5	ug/Kg	04/21/12		H/P	SW8260
trans-1,2-Dichloroethene	ND	5	ug/Kg	04/21/12		H/P	SW8260
trans-1,3-Dichloropropene	ND	5	ug/Kg	04/21/12		H/P	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/21/12		H/P	SW8260
Trichloroethene	ND	5	ug/Kg	04/21/12		H/P	SW8260
Trichlorofluoromethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Trichlorotrifluoroethane	ND	5	ug/Kg	04/21/12		H/P	SW8260
Vinyl chloride	ND	5	ug/Kg	04/21/12		H/P	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/21/12		H/P	70 - 130 %
% Bromofluorobenzene	96		%	04/21/12		H/P	70 - 130 %
% Dibromofluoromethane	96		%	04/21/12		H/P	70 - 130 %
% Toluene-d8	99		%	04/21/12		H/P	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	700	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-60 3-5 FT

Phoenix I.D.: BB74227

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	700	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	430	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	300	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	700	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1300	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	430	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	700	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1300	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	300	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1300	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	430	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	520	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	550	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1300	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	430	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	650	ug/Kg	04/20/12		DD	SW 8270
Chrysene	440	300	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	300	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	540	300	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	300	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	300	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	430	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-60 3-5 FT

Phoenix I.D.: BB74227

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	300	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	430	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	430	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	430	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
Pyrene	500	300	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	430	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	63		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/20/12		DD	15 - 130 %
% Phenol-d5	73		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/20/12		DD	15 - 130 %

Comments:

8260 comment:
Sample exhibited severe matrix interference. Both Low-level vials were analyzed with very poor internal standard response. The high level analysis did not exhibit this interference. Had any compounds been detected in the high level analysis, they would have been reported at that dilution. The low level analysis was reported, in order to meet the requested reporting criteria, the surrogate recoveries are from the high level analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	11:31
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74228

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-61 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	04/20/12		LK	6010
Arsenic	5.05	0.78	mg/Kg	04/20/12		LK	6010
Barium	59.3	0.39	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.39	0.39	mg/Kg	04/20/12		LK	6010
Chromium	17.8	0.39	mg/Kg	04/20/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	04/20/12		JA	SW-7471
Lead	26.1	0.39	mg/Kg	04/20/12		LK	6010
Selenium	< 1.6	1.6	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/24/12		EK	6010
SPLP Barium	0.015	0.010	mg/L	04/24/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/24/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/22/12		JA	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/24/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/24/12		X/X	SW846-3005
Percent Solid	76		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		BB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		BB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-61 1-3 FT

Phoenix I.D.: BB74228

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	55	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	550	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	55	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	110	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	55	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	110	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	13	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	63		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	430	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	430	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	98		%	04/20/12		MH	30 - 150 %
% TCMX	76		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	42	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	42	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	42	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	21	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.5	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	65	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	21	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.5	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	21	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	42	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	42	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	42	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.5	ug/Kg	04/20/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	13	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	20	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	210	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	210	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	71		%	04/20/12		MR	30 - 150 %
% TCMX	80		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.0	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	33	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	130	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	4.0	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-61 1-3 FT

Phoenix I.D.: BB74228

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	40	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	6.6	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	85		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	107		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	96		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	680	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-61 1-3 FT

Phoenix I.D.: BB74228

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	300	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	680	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	300	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	680	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	680	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	300	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	530	300	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	510	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	460	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	760	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	300	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	640	ug/Kg	04/20/12		DD	SW 8270
Chrysene	630	300	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	300	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	300	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	1500	300	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	300	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	300	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	300	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	300	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-61 1-3 FT

Phoenix I.D.: BB74228

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	300	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	420	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	770	300	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	300	ug/Kg	04/20/12		DD	SW 8270
Pyrene	1200	300	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	420	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	60		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	76		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/20/12		DD	15 - 130 %
% Phenol-d5	75		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	92		%	04/20/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	11:09
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74229

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-62 6-8 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	04/20/12		LK	6010
Arsenic	3.29	0.77	mg/Kg	04/20/12		LK	6010
Barium	60.0	0.39	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.39	0.39	mg/Kg	04/20/12		LK	6010
Chromium	15.2	0.39	mg/Kg	04/20/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/20/12		JA	SW-7471
Lead	12.3	0.39	mg/Kg	04/20/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/24/12		EK	6010
SPLP Barium	0.021	0.010	mg/L	04/24/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/24/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/22/12		JA	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/24/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/24/12		X/X	SW846-3005
Percent Solid	83		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-62 6-8 FT

Phoenix I.D.: BB74229

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	12	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	81		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	84		%	04/20/12		MH	30 - 150 %
% TCMX	63		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	38	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	38	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	19	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.0	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	60	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	19	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.0	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	19	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	38	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	38	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	38	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.0	ug/Kg	04/20/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	19	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	190	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	190	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	57		%	04/20/12		MR	30 - 150 %
% TCMX	65		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	30	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	120	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-62 6-8 FT

Phoenix I.D.: BB74229

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	89		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	90		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	97		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	630	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-62 6-8 FT

Phoenix I.D.: BB74229

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	630	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	280	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	470	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	390	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	590	ug/Kg	04/20/12		DD	SW 8270
Chrysene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	280	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	280	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	280	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	280	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-62 6-8 FT

Phoenix I.D.: BB74229

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	390	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	390	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	280	ug/Kg	04/20/12		DD	SW 8270
Pyrene	ND	280	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	390	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	117		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	80		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	04/20/12		DD	15 - 130 %
% Phenol-d5	78		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	100		%	04/20/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	10:43
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74230

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-63 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/20/12		LK	6010
Arsenic	2.99	0.67	mg/Kg	04/20/12		LK	6010
Barium	39.7	0.34	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/20/12		LK	6010
Chromium	10.4	0.34	mg/Kg	04/20/12		LK	6010
Mercury	< 0.06	0.06	mg/Kg	04/20/12		JA	SW-7471
Lead	24.2	0.34	mg/Kg	04/20/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Arsenic	0.016	0.004	mg/L	04/24/12		EK	6010
SPLP Barium	0.183	0.010	mg/L	04/24/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/24/12		EK	6010
SPLP Chromium	0.028	0.010	mg/L	04/24/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/22/12		JA	1312/SW7470
SPLP Lead	0.201	0.010	mg/L	04/24/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/24/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/24/12		X/X	SW846-3005
Percent Solid	93		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-63 3-5 FT

Phoenix I.D.: BB74230

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	89	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	89	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	30	11	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	76		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	100		%	04/20/12		MH	30 - 150 %
% TCMX	76		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/20/12		MR	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-63 3-5 FT

Phoenix I.D.: BB74230

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	85		%	04/20/12		MR	30 - 150 %
% TCMX	76		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	27	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-63 3-5 FT

Phoenix I.D.: BB74230

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	92		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	103		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	98		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	570	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-63 3-5 FT

Phoenix I.D.: BB74230

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	570	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	570	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	570	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	500	250	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Anthracene	860	250	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	2400	250	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	430	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	1900	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	3200	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	1100	250	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	1100	250	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	530	ug/Kg	04/20/12		DD	SW 8270
Chrysene	4100	250	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	450	250	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	1800	250	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	1100	250	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	250	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-63 3-5 FT

Phoenix I.D.: BB74230

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	720	250	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	250	ug/Kg	04/20/12		DD	SW 8270
Pyrene	2500	250	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	100		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	65		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	70		%	04/20/12		DD	15 - 130 %
% Phenol-d5	66		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	86		%	04/20/12		DD	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C16 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	10:24
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74231

Project ID: METRO NORTH CATENARY PROJECT

Client ID: GP-64 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	04/20/12		LK	6010
Arsenic	3.71	0.83	mg/Kg	04/20/12		LK	6010
Barium	32.7	0.42	mg/Kg	04/20/12		LK	6010
Cadmium	< 0.42	0.42	mg/Kg	04/20/12		LK	6010
Chromium	11.9	0.42	mg/Kg	04/20/12		LK	6010
Mercury	< 0.08	0.08	mg/Kg	04/20/12		JA	SW-7471
Lead	12.9	0.42	mg/Kg	04/20/12		LK	6010
Selenium	< 1.7	1.7	mg/Kg	04/20/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Arsenic	0.005	0.004	mg/L	04/24/12		EK	6010
SPLP Barium	0.065	0.010	mg/L	04/24/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/24/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/24/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/22/12		JA	1312/SW7470
SPLP Lead	0.212	0.010	mg/L	04/24/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/24/12		EK	6010
Total Metals Digest	Completed			04/19/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/24/12		X/X	SW846-3005
Percent Solid	79		%	04/19/12		JL	E160.3
Soil Extraction for PCB	Completed			04/19/12		RB	SW3545
Soil Extraction for Pesticide	Completed			04/19/12		RB/F	SW3545
Soil Extraction for SVOA	Completed			04/19/12		BS/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		BS/F	3545
Mercury Digestion	Completed			04/20/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/19/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/20/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/19/12		X	EPA 1312
Field Extraction	Completed			04/18/12		CK	SW5035

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-64 3-5 FT

Phoenix I.D.: BB74231

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	53	ug/Kg	04/20/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	53	ug/Kg	04/20/12		JRB	SW8151
2,4-D	ND	53	ug/Kg	04/20/12		JRB	SW8151
2,4-DB	ND	530	ug/Kg	04/20/12		JRB	SW8151
Dalapon	ND	53	ug/Kg	04/20/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	04/20/12		JRB	SW8151
Dichloroprop	ND	53	ug/Kg	04/20/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	04/20/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	04/20/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	12	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	85		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	04/20/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	04/20/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	82		%	04/20/12		MH	30 - 150 %
% TCMX	59		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	40	ug/Kg	04/20/12		MR	SW8081
4,4' -DDE	ND	40	ug/Kg	04/20/12		MR	SW8081
4,4' -DDT	ND	40	ug/Kg	04/20/12		MR	SW8081
a-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Alachlor	ND	20	ug/Kg	04/20/12		MR	SW8081
Aldrin	ND	6.2	ug/Kg	04/20/12		MR	SW8081
b-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Chlordane	ND	62	ug/Kg	04/20/12		MR	SW8081
d-BHC	ND	20	ug/Kg	04/20/12		MR	SW8081
Dieldrin	ND	6.2	ug/Kg	04/20/12		MR	SW8081
Endosulfan I	ND	20	ug/Kg	04/20/12		MR	SW8081
Endosulfan II	ND	40	ug/Kg	04/20/12		MR	SW8081
Endosulfan sulfate	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin aldehyde	ND	40	ug/Kg	04/20/12		MR	SW8081
Endrin ketone	ND	40	ug/Kg	04/20/12		MR	SW8081
g-BHC	ND	6.2	ug/Kg	04/20/12		MR	SW8081

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-64 3-5 FT

Phoenix I.D.: BB74231

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	04/20/12		MR	SW8081
Heptachlor epoxide	ND	20	ug/Kg	04/20/12		MR	SW8081
Methoxychlor	ND	200	ug/Kg	04/20/12		MR	SW8081
Toxaphene	ND	200	ug/Kg	04/20/12		MR	SW8081
QA/QC Surrogates							
% DCBP	58		%	04/20/12		MR	30 - 150 %
% TCMX	61		%	04/20/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	120	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-64 3-5 FT

Phoenix I.D.: BB74231

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	90		%	04/20/12		H/J	70 - 130 %
% Dibromofluoromethane	93		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	100		%	04/20/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,2-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,3-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
1,4-Dichlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dichlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dimethylphenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrophenol	ND	670	ug/Kg	04/20/12		DD	SW 8270
2,4-Dinitrotoluene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2,6-Dinitrotoluene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Chloronaphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Chlorophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Methylnaphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-64 3-5 FT

Phoenix I.D.: BB74231

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	290	ug/Kg	04/20/12		DD	SW 8270
2-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
2-Nitrophenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	04/20/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	290	ug/Kg	04/20/12		DD	SW 8270
3-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Chloroaniline	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	04/20/12		DD	SW 8270
4-Nitroaniline	ND	670	ug/Kg	04/20/12		DD	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Acenaphthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Acenaphthylene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Acetophenone	ND	290	ug/Kg	04/20/12		DD	SW 8270
Aniline	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Azobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Benz(a)anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzidine	ND	500	ug/Kg	04/20/12		DD	SW 8270
Benzo(a)pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(b)fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(ghi)perylene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzo(k)fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Benzoic acid	ND	1200	ug/Kg	04/20/12		DD	SW 8270
Benzyl butyl phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	420	ug/Kg	04/20/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	04/20/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Carbazole	ND	620	ug/Kg	04/20/12		DD	SW 8270
Chrysene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dibenzofuran	ND	290	ug/Kg	04/20/12		DD	SW 8270
Diethyl phthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Dimethylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Di-n-butylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Di-n-octylphthalate	ND	290	ug/Kg	04/20/12		DD	SW 8270
Fluoranthene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Fluorene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorobutadiene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Hexachloroethane	ND	290	ug/Kg	04/20/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Isophorone	ND	290	ug/Kg	04/20/12		DD	SW 8270
Naphthalene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Nitrobenzene	ND	290	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodimethylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270

Project ID: METRO NORTH CATENARY PROJECT
Client ID: GP-64 3-5 FT

Phoenix I.D.: BB74231

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	290	ug/Kg	04/20/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachloronitrobenzene	ND	420	ug/Kg	04/20/12		DD	SW 8270
Pentachlorophenol	ND	420	ug/Kg	04/20/12		DD	SW 8270
Phenanthrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Phenol	ND	290	ug/Kg	04/20/12		DD	SW 8270
Pyrene	ND	290	ug/Kg	04/20/12		DD	SW 8270
Pyridine	ND	420	ug/Kg	04/20/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	04/20/12		DD	15 - 130 %
% 2-Fluorobiphenyl	56		%	04/20/12		DD	15 - 130 %
% 2-Fluorophenol	61		%	04/20/12		DD	15 - 130 %
% Nitrobenzene-d5	63		%	04/20/12		DD	15 - 130 %
% Phenol-d5	58		%	04/20/12		DD	15 - 130 %
% Terphenyl-d14	83		%	04/20/12		DD	15 - 130 %

Comments:

For Pesticides, contamination in the blank was observed. No sample bias is suspected. Samples were ND.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 26, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 26, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/18/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/19/12	12:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB74223
Phoenix ID: BB74232

Project ID: METRO NORTH CATENARY PROJECT

Client ID: TB-7

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			04/18/12		CK	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	04/20/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	04/20/12		H/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260

Project ID: METRO NORTH CATENARY PROJECT
Client ID: TB-7

Phoenix I.D.: BB74232

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	04/20/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/20/12		H/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Benzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Bromoform	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Bromomethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Chloroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Chloroform	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Chloromethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	04/20/12		H/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/20/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/20/12		H/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Naphthalene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
o-Xylene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Styrene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/20/12		H/J	SW8260
Toluene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/20/12		H/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	04/20/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/20/12		H/J	70 - 130 %
% Bromofluorobenzene	97		%	04/20/12		H/J	70 - 130 %

Project ID: METRO NORTH CATENARY PROJECT

Client ID: TB-7

Phoenix I.D.: BB74232

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	98		%	04/20/12		H/J	70 - 130 %
% Toluene-d8	99		%	04/20/12		H/J	70 - 130 %

Comments:

TRIP BLANK INCLUDED 100% SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 26, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 26, 2012

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198603, QC Sample No: BB54292 (BB74223, BB74224, BB74225, BB74226, BB74227)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.033	0.042	24.0	91.6	93.6	2.2	95.9	95.2	0.7	75 - 125	20	r
Barium	BDL	0.079	0.120	41.2	97.3	98.2	0.9	101	102	1.0	75 - 125	20	r
Cadmium	BDL	<0.005	<0.005	NC	91.2	93.4	2.4	94.4	94.2	0.2	75 - 125	20	
Chromium	BDL	0.010	0.013	NC	95.8	98.0	2.3	100	99.3	0.7	75 - 125	20	
Lead	BDL	0.462	0.699	40.8	94.8	97.5	2.8	101	106	4.8	75 - 125	20	r
Selenium	BDL	<0.020	<0.020	NC	95.6	99.2	3.7	100	98.9	1.1	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	92.9	94.3	1.5	97.1	95.9	1.2	75 - 125	20	
QA/QC Batch 198757, QC Sample No: BB73743 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)													
ICP Metals - Soil													
Arsenic	BDL	0.97	<0.65	NC	103	99.5	3.5	92.8	93.1	0.3	75 - 125	30	
Barium	BDL	75.2	68.7	9.00	101	98.7	2.3	103	104	1.0	75 - 125	30	
Cadmium	BDL	<0.34	<0.32	NC	104	101	2.9	96.9	97.2	0.3	75 - 125	30	
Chromium	BDL	18.5	18.0	2.70	103	97.0	6.0	95.1	94.7	0.4	75 - 125	30	
Lead	BDL	6.23	5.62	10.3	>130	108	NC	93.0	92.7	0.3	75 - 125	30	l
Selenium	BDL	<1.4	<1.3	NC	87.7	83.1	5.4	81.1	80.6	0.6	75 - 125	30	
Silver	BDL	<0.34	<0.32	NC	100	95.7	4.4	95.3	95.1	0.2	75 - 125	30	
QA/QC Batch 198798, QC Sample No: BB74180 (BB74223, BB74224, BB74225, BB74226)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	95.4	94.4	1.1	102	102	0.0	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 198796, QC Sample No: BB74223 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229)													
Mercury - Soil	BDL	<0.07	<0.08	NC	92.4	94.5	2.2	101	106	4.8	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 199052, QC Sample No: BB74228 (BB74228, BB74229, BB74230, BB74231)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	<0.004	0.006	NC	99.6	98.7	0.9	99.2	98.8	0.4	75 - 125	20	
Barium	BDL	0.015	0.073	NC	99.1	98.0	1.1	105	105	0.0	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	101	99.8	1.2	101	100	1.0	75 - 125	20	
Chromium	BDL	<0.010	0.019	NC	99.0	97.7	1.3	102	102	0.0	75 - 125	20	
Lead	BDL	<0.010	0.023	NC	97.9	96.9	1.0	100	99.8	0.2	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	102	100	2.0	98.8	98.9	0.1	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	97.0	96.4	0.6	97.8	98.5	0.7	75 - 125	20	
QA/QC Batch 198797, QC Sample No: BB74230 (BB74230, BB74231)													
Mercury - Soil	BDL	<0.06	<0.08	NC	84.6	91.6	7.9	107	102	4.8	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 198799, QC Sample No: BB74568 (BB74227, BB74228, BB74229, BB74230, BB74231)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	94.5	91.8	2.9	97.8	99.3	1.5	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 26, 2012

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198554, QC Sample No: BB72484 (BB74223, BB74224)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	84	85	1.2	90	70	25.0	40 - 140	30	
2,4,5-TP (Silvex)	ND	84	84	0.0	77	70	9.5	40 - 140	30	
2,4-D	ND	91	89	2.2	85	87	2.3	40 - 140	30	
2,4-DB	ND	80	84	4.9	98	84	15.4	40 - 140	30	
Dalapon	ND	73	82	11.6	49	54	9.7	40 - 140	30	
Dicamba	ND	84	84	0.0	69	64	7.5	40 - 140	30	
Dichloroprop	ND	72	70	2.8	70	67	4.4	40 - 140	30	
Dinoseb	ND	52	46	12.2	27	22	20.4	40 - 140	30	m
% DCAA (Surrogate Rec)	72	68	67	1.5	59	54	8.8	30 - 150	30	
QA/QC Batch 198651, QC Sample No: BB73581 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228)										
Pesticides - Soil										
4,4' -DDD	ND	79	80	1.3	86	90	4.5	40 - 140	30	
4,4' -DDE	ND	82	83	1.2	87	88	1.1	40 - 140	30	
4,4' -DDT	ND	78	79	1.3	83	86	3.6	40 - 140	30	
a-BHC	ND	87	86	1.2	92	92	0.0	40 - 140	30	
a-Chlordane	ND	79	80	1.3	83	83	0.0	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	82	83	1.2	87	88	1.1	40 - 140	30	
b-BHC	ND	81	81	0.0	88	89	1.1	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	83	84	1.2	90	91	1.1	40 - 140	30	
Dieldrin	ND	83	84	1.2	88	89	1.1	40 - 140	30	
Endosulfan I	ND	77	79	2.6	83	83	0.0	40 - 140	30	
Endosulfan II	ND	68	73	7.1	84	83	1.2	40 - 140	30	
Endosulfan sulfate	ND	70	72	2.8	81	81	0.0	40 - 140	30	
Endrin	ND	81	81	0.0	87	87	0.0	40 - 140	30	
Endrin aldehyde	ND	65	69	6.0	91	91	0.0	40 - 140	30	
Endrin ketone	ND	78	82	5.0	87	90	3.4	40 - 140	30	
g-BHC	ND	86	85	1.2	92	92	0.0	40 - 140	30	
g-Chlordane	ND	81	81	0.0	85	85	0.0	40 - 140	30	
Heptachlor	ND	78	77	1.3	80	79	1.3	40 - 140	30	
Heptachlor epoxide	ND	82	83	1.2	87	87	0.0	40 - 140	30	
Methoxychlor	ND	73	73	0.0	87	99	12.9	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	77	70	67	4.4	74	82	10.3	30 - 150	30	
% TCMX	86	81	78	3.8	81	81	0.0	30 - 150	30	
QA/QC Batch 198967, QC Sample No: BB73715 (BB74223, BB74224, BB74226, BB74228, BB74229, BB74230, BB74231, BB74232)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	109	107	1.9	103	103	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	112	112	0.0	106	107	0.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,2,2-Tetrachloroethane	ND	98	100	2.0	108	104	3.8	70 - 130	30	
1,1,2-Trichloroethane	ND	106	104	1.9	98	99	1.0	70 - 130	30	
1,1-Dichloroethane	ND	110	95	14.6	94	108	13.9	70 - 130	30	
1,1-Dichloroethene	ND	102	98	4.0	99	83	17.6	70 - 130	30	
1,1-Dichloropropene	ND	111	103	7.5	103	107	3.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	108	108	0.0	118	110	7.0	70 - 130	30	
1,2,3-Trichloropropane	ND	109	114	4.5	110	99	10.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	107	103	3.8	119	120	0.8	70 - 130	30	
1,2,4-Trimethylbenzene	ND	111	106	4.6	108	111	2.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	114	114	0.0	106	95	10.9	70 - 130	30	
1,2-Dichlorobenzene	ND	104	100	3.9	105	108	2.8	70 - 130	30	
1,2-Dichloroethane	ND	100	102	2.0	97	97	0.0	70 - 130	30	
1,2-Dichloropropane	ND	105	102	2.9	100	100	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	113	108	4.5	107	110	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	105	98	6.9	105	112	6.5	70 - 130	30	
1,3-Dichloropropane	ND	106	105	0.9	101	101	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	104	97	7.0	105	111	5.6	70 - 130	30	
2,2-Dichloropropane	ND	115	96	18.0	90	108	18.2	70 - 130	30	
2-Chlorotoluene	ND	107	104	2.8	105	110	4.7	70 - 130	30	
2-Hexanone	ND	97	96	1.0	58	56	3.5	70 - 130	30	m
2-Isopropyltoluene	ND	112	103	8.4	107	111	3.7	70 - 130	30	
4-Chlorotoluene	ND	105	99	5.9	107	113	5.5	70 - 130	30	
4-Methyl-2-pentanone	ND	98	101	3.0	92	88	4.4	70 - 130	30	
Acetone	ND	91	99	8.4	41	<40	NC	70 - 130	30	m
Acrylonitrile	ND	106	104	1.9	101	103	2.0	70 - 130	30	
Benzene	ND	104	101	2.9	99	100	1.0	70 - 130	30	
Bromobenzene	ND	109	106	2.8	104	107	2.8	70 - 130	30	
Bromochloromethane	ND	110	96	13.6	96	108	11.8	70 - 130	30	
Bromodichloromethane	ND	107	104	2.8	98	100	2.0	70 - 130	30	
Bromoform	ND	111	109	1.8	99	98	1.0	70 - 130	30	
Bromomethane	ND	106	93	13.1	40	55	31.6	70 - 130	30	m,r
Carbon Disulfide	ND	102	96	6.1	96	82	15.7	70 - 130	30	
Carbon tetrachloride	ND	115	99	15.0	104	104	0.0	70 - 130	30	
Chlorobenzene	ND	105	98	6.9	101	104	2.9	70 - 130	30	
Chloroethane	ND	113	65	53.9	<40	<40	NC	70 - 130	30	l,m,r
Chloroform	ND	112	95	16.4	94	108	13.9	70 - 130	30	
Chloromethane	ND	105	102	2.9	103	97	6.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	110	96	13.6	95	108	12.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	105	104	1.0	99	99	0.0	70 - 130	30	
Dibromochloromethane	ND	109	107	1.9	100	99	1.0	70 - 130	30	
Dibromoethane	ND	104	105	1.0	98	96	2.1	70 - 130	30	
Dibromomethane	ND	107	105	1.9	100	99	1.0	70 - 130	30	
Dichlorodifluoromethane	ND	109	91	18.0	78	107	31.4	70 - 130	30	r
Ethylbenzene	ND	108	101	6.7	100	105	4.9	70 - 130	30	
Hexachlorobutadiene	ND	112	103	8.4	117	122	4.2	70 - 130	30	
Isopropylbenzene	ND	106	101	4.8	101	105	3.9	70 - 130	30	
m&p-Xylene	ND	107	100	6.8	100	105	4.9	70 - 130	30	
Methyl ethyl ketone	ND	97	101	4.0	66	57	14.6	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	97	96	1.0	97	112	14.4	70 - 130	30	
Methylene chloride	ND	100	93	7.3	94	93	1.1	70 - 130	30	
Naphthalene	ND	110	115	4.4	116	101	13.8	70 - 130	30	
n-Butylbenzene	ND	116	103	11.9	108	120	10.5	70 - 130	30	
n-Propylbenzene	ND	105	99	5.9	106	111	4.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
o-Xylene	ND	106	100	5.8	102	106	3.8	70 - 130	30	
p-Isopropyltoluene	ND	118	107	9.8	106	114	7.3	70 - 130	30	
sec-Butylbenzene	ND	110	101	8.5	105	111	5.6	70 - 130	30	
Styrene	ND	107	101	5.8	103	109	5.7	70 - 130	30	
tert-Butylbenzene	ND	110	102	7.5	103	108	4.7	70 - 130	30	
Tetrachloroethene	ND	106	99	6.8	102	105	2.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	103	102	1.0	107	100	6.8	70 - 130	30	
Toluene	ND	106	102	3.8	100	102	2.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	104	99	4.9	98	99	1.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	107	106	0.9	101	101	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	111	113	1.8	98	96	2.1	70 - 130	30	
Trichloroethene	ND	107	102	4.8	94	96	2.1	70 - 130	30	
Trichlorofluoromethane	ND	125	116	7.5	<40	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	101	95	6.1	99	85	15.2	70 - 130	30	
Vinyl chloride	ND	112	96	15.4	103	109	5.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	100	100	0.0	102	102	0.0	70 - 130	30	
% Bromofluorobenzene	96	98	97	1.0	96	100	4.1	70 - 130	30	
% Dibromofluoromethane	102	96	101	5.1	100	100	0.0	70 - 130	30	
% Toluene-d8	96	98	99	1.0	98	99	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 199065, QC Sample No: BB73743 (BB74227)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	107	106	0.9	102	101	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	116	110	5.3	97	106	8.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	115	106	8.1	108	101	6.7	70 - 130	30	
1,1,2-Trichloroethane	ND	106	103	2.9	100	98	2.0	70 - 130	30	
1,1-Dichloroethane	ND	100	109	8.6	99	108	8.7	70 - 130	30	
1,1-Dichloroethene	ND	103	102	1.0	99	88	11.8	70 - 130	30	
1,1-Dichloropropene	ND	105	107	1.9	101	105	3.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	130	123	5.5	114	109	4.5	70 - 130	30	
1,2,3-Trichloropropane	ND	121	109	10.4	108	98	9.7	70 - 130	30	
1,2,4-Trichlorobenzene	ND	132	129	2.3	121	121	0.0	70 - 130	30	l
1,2,4-Trimethylbenzene	ND	115	115	0.0	112	111	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	116	106	9.0	98	91	7.4	70 - 130	30	
1,2-Dichlorobenzene	ND	109	108	0.9	105	105	0.0	70 - 130	30	
1,2-Dichloroethane	ND	103	99	4.0	100	97	3.0	70 - 130	30	
1,2-Dichloropropane	ND	104	103	1.0	101	99	2.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	116	116	0.0	111	108	2.7	70 - 130	30	
1,3-Dichlorobenzene	ND	110	112	1.8	108	109	0.9	70 - 130	30	
1,3-Dichloropropane	ND	109	101	7.6	102	98	4.0	70 - 130	30	
1,4-Dichlorobenzene	ND	111	113	1.8	110	110	0.0	70 - 130	30	
2,2-Dichloropropane	ND	106	120	12.4	100	112	11.3	70 - 130	30	
2-Chlorotoluene	ND	109	112	2.7	108	109	0.9	70 - 130	30	
2-Hexanone	ND	93	85	9.0	57	55	3.6	70 - 130	30	m
2-Isopropyltoluene	ND	109	110	0.9	107	108	0.9	70 - 130	30	
4-Chlorotoluene	ND	109	109	0.0	111	112	0.9	70 - 130	30	
4-Methyl-2-pentanone	ND	104	95	9.0	94	85	10.1	70 - 130	30	
Acetone	ND	115	99	15.0	42	<40	NC	70 - 130	30	m
Acrylonitrile	ND	112	102	9.3	110	105	4.7	70 - 130	30	
Benzene	ND	103	101	2.0	102	99	3.0	70 - 130	30	
Bromobenzene	ND	111	111	0.0	106	106	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromochloromethane	ND	105	108	2.8	100	107	6.8	70 - 130	30	
Bromodichloromethane	ND	104	105	1.0	100	100	0.0	70 - 130	30	
Bromoform	ND	106	104	1.9	93	94	1.1	70 - 130	30	
Bromomethane	ND	96	108	11.8	45	62	31.8	70 - 130	30	m,r
Carbon Disulfide	ND	103	101	2.0	98	87	11.9	70 - 130	30	
Carbon tetrachloride	ND	102	109	6.6	94	102	8.2	70 - 130	30	
Chlorobenzene	ND	103	103	0.0	101	103	2.0	70 - 130	30	
Chloroethane	ND	109	110	0.9	<40	<40	NC	70 - 130	30	m
Chloroform	ND	101	113	11.2	100	107	6.8	70 - 130	30	
Chloromethane	ND	109	102	6.6	99	93	6.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	103	108	4.7	101	106	4.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	107	107	0.0	104	101	2.9	70 - 130	30	
Dibromochloromethane	ND	107	104	2.8	98	98	0.0	70 - 130	30	
Dibromoethane	ND	106	102	3.8	99	97	2.0	70 - 130	30	
Dibromomethane	ND	108	105	2.8	102	100	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	89	112	22.9	51	99	64.0	70 - 130	30	m,r
Ethylbenzene	ND	105	107	1.9	102	105	2.9	70 - 130	30	
Hexachlorobutadiene	ND	117	118	0.9	112	116	3.5	70 - 130	30	
Isopropylbenzene	ND	104	106	1.9	103	104	1.0	70 - 130	30	
m&p-Xylene	ND	106	107	0.9	103	105	1.9	70 - 130	30	
Methyl ethyl ketone	ND	117	103	12.7	61	54	12.2	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	98	95	3.1	103	94	9.1	70 - 130	30	
Methylene chloride	ND	105	105	0.0	101	99	2.0	70 - 130	30	
Naphthalene	ND	127	114	10.8	109	100	8.6	70 - 130	30	
n-Butylbenzene	ND	120	126	4.9	116	119	2.6	70 - 130	30	
n-Propylbenzene	ND	105	108	2.8	111	112	0.9	70 - 130	30	
o-Xylene	ND	104	106	1.9	103	106	2.9	70 - 130	30	
p-Isopropyltoluene	ND	117	121	3.4	111	112	0.9	70 - 130	30	
sec-Butylbenzene	ND	107	111	3.7	107	109	1.9	70 - 130	30	
Styrene	ND	107	109	1.9	106	108	1.9	70 - 130	30	
tert-Butylbenzene	ND	106	107	0.9	104	106	1.9	70 - 130	30	
Tetrachloroethene	ND	105	103	1.9	102	102	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	113	100	12.2	96	95	1.0	70 - 130	30	
Toluene	ND	105	107	1.9	102	102	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	106	104	1.9	106	101	4.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	112	111	0.9	107	103	3.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	123	116	5.9	104	99	4.9	70 - 130	30	
Trichloroethene	ND	98	98	0.0	94	94	0.0	70 - 130	30	
Trichlorofluoromethane	ND	122	125	2.4	<40	45	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	103	104	1.0	99	89	10.6	70 - 130	30	
Vinyl chloride	ND	109	110	0.9	65	108	49.7	70 - 130	30	m,r
% 1,2-dichlorobenzene-d4	100	101	101	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	96	96	101	5.1	97	100	3.0	70 - 130	30	
% Dibromofluoromethane	109	104	99	4.9	103	99	4.0	70 - 130	30	
% Toluene-d8	96	98	100	2.0	99	102	3.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198669, QC Sample No: BB73875 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	99	94	5.2	94	97	3.1	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	99	96	3.1	109	105	3.7	40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	110	98	93	5.2	97	97	0.0	30 - 150	30	
% TCMX (Surrogate Rec)	88	84	78	7.4	81	81	0.0	30 - 150	30	

QA/QC Batch 198666, QC Sample No: BB73875 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	42	42	0.0	62	58	6.7	30 - 130	30	
1,2,4-Trichlorobenzene	ND	62	62	0.0	86	82	4.8	30 - 130	30	
1,2-Dichlorobenzene	ND	61	61	0.0	74	75	1.3	30 - 130	30	
1,3-Dichlorobenzene	ND	59	59	0.0	72	72	0.0	30 - 130	30	
1,4-Dichlorobenzene	ND	61	60	1.7	75	75	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	75	77	2.6	95	94	1.1	30 - 130	30	
2,4,6-Trichlorophenol	ND	73	74	1.4	95	93	2.1	30 - 130	30	
2,4-Dichlorophenol	ND	73	74	1.4	95	91	4.3	30 - 130	30	
2,4-Dimethylphenol	ND	53	54	1.9	62	67	7.8	30 - 130	30	
2,4-Dinitrophenol	ND	<5	7.7	NC	8.5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	83	85	2.4	91	98	7.4	30 - 130	30	
2,6-Dinitrotoluene	ND	79	81	2.5	85	89	4.6	30 - 130	30	
2-Chloronaphthalene	ND	67	65	3.0	80	81	1.2	30 - 130	30	
2-Chlorophenol	ND	65	66	1.5	76	79	3.9	30 - 130	30	
2-Methylnaphthalene	ND	65	66	1.5	86	85	1.2	30 - 130	30	
2-Methylphenol (o-cresol)	ND	66	68	3.0	72	78	8.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	75	78	3.9	71	82	14.4	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	67	68	1.5	73	80	9.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	50	52	3.9	51	54	5.7	30 - 130	30	
3-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4,6-Dinitro-2-methylphenol	ND	67	81	18.9	43	25	52.9	30 - 130	30	m,r
4-Bromophenyl phenyl ether	ND	69	69	0.0	91	84	8.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	77	79	2.6	77	85	9.9	30 - 130	30	
4-Chloroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	67	67	0.0	94	91	3.2	30 - 130	30	
4-Nitroaniline	ND	85	87	2.3	60	80	28.6	30 - 130	30	
4-Nitrophenol	ND	86	90	4.5	74	104	33.7	30 - 130	30	r
Acenaphthene	ND	68	69	1.5	85	86	1.2	30 - 130	30	
Acenaphthylene	ND	66	66	0.0	82	83	1.2	30 - 130	30	
Acetophenone	ND	33	34	3.0	35	39	10.8	30 - 130	30	
Aniline	ND	61	64	4.8	51	62	19.5	30 - 130	30	
Anthracene	ND	71	70	1.4	90	90	0.0	30 - 130	30	
Azobenzene	ND	37	38	2.7	30	39	26.1	30 - 130	30	
Benz(a)anthracene	ND	78	79	1.3	95	92	3.2	30 - 130	30	
Benzidine	ND	93	123	27.8	11	25	77.8	30 - 130	30	m,r
Benzo(a)pyrene	ND	66	67	1.5	78	77	1.3	30 - 130	30	
Benzo(b)fluoranthene	ND	71	72	1.4	90	88	2.2	30 - 130	30	
Benzo(ghi)perylene	ND	88	74	17.3	86	65	27.8	30 - 130	30	
Benzo(k)fluoranthene	ND	65	72	10.2	80	85	6.1	30 - 130	30	
Benzyl butyl phthalate	ND	71	69	2.9	70	80	13.3	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	65	66	1.5	64	73	13.1	30 - 130	30	

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bis(2-chloroethyl)ether	ND	50	50	0.0	50	56	11.3	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	64	65	1.6	46	64	32.7	30 - 130	30	r
Bis(2-ethylhexyl)phthalate	ND	67	62	7.8	64	75	15.8	30 - 130	30	
Carbazole	ND	92	94	2.2	121	125	3.3	30 - 130	30	
Chrysene	ND	71	72	1.4	83	83	0.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	87	76	13.5	98	81	19.0	30 - 130	30	
Dibenzofuran	ND	66	66	0.0	84	84	0.0	30 - 130	30	
Diethyl phthalate	ND	71	72	1.4	77	82	6.3	30 - 130	30	
Dimethylphthalate	ND	69	70	1.4	80	81	1.2	30 - 130	30	
Di-n-butylphthalate	ND	66	67	1.5	73	79	7.9	30 - 130	30	
Di-n-octylphthalate	ND	71	70	1.4	59	69	15.6	30 - 130	30	
Fluoranthene	ND	68	71	4.3	104	89	15.5	30 - 130	30	
Fluorene	ND	68	68	0.0	90	91	1.1	30 - 130	30	
Hexachlorobenzene	ND	70	68	2.9	64	71	10.4	30 - 130	30	
Hexachlorobutadiene	ND	65	65	0.0	101	92	9.3	30 - 130	30	
Hexachlorocyclopentadiene	ND	68	77	12.4	18	7.4	83.5	30 - 130	30	m,r
Hexachloroethane	ND	60	61	1.7	56	54	3.6	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	87	75	14.8	95	78	19.7	30 - 130	30	
Isophorone	ND	66	66	0.0	61	72	16.5	30 - 130	30	
Naphthalene	ND	67	68	1.5	86	87	1.2	30 - 130	30	
Nitrobenzene	ND	67	69	2.9	61	73	17.9	30 - 130	30	
N-Nitrosodimethylamine	ND	49	53	7.8	42	50	17.4	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	65	69	6.0	58	70	18.8	30 - 130	30	
N-Nitrosodiphenylamine	ND	79	80	1.3	96	99	3.1	30 - 130	30	
Pentachloronitrobenzene	ND	81	81	0.0	94	93	1.1	30 - 130	30	
Pentachlorophenol	ND	41	46	11.5	105	99	5.9	30 - 130	30	
Phenanthrene	ND	71	71	0.0	86	86	0.0	30 - 130	30	
Phenol	ND	71	73	2.8	71	80	11.9	30 - 130	30	
Pyrene	ND	70	73	4.2	106	88	18.6	30 - 130	30	
Pyridine	ND	21	21	0.0	17	20	16.2	30 - 130	30	l,m
% 2,4,6-Tribromophenol	82	79	79	0.0	51	72	34.1	15 - 130	30	r
% 2-Fluorobiphenyl	62	61	60	1.7	80	77	3.8	30 - 130	30	
% 2-Fluorophenol	64	61	62	1.6	67	72	7.2	15 - 130	30	
% Nitrobenzene-d5	71	67	69	2.9	61	72	16.5	30 - 130	30	
% Phenol-d5	65	63	64	1.6	63	69	9.1	15 - 130	30	
% Terphenyl-d14	83	76	80	5.1	128	105	19.7	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198754, QC Sample No: BB74225 (BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

Chlorinated Herbicides - Soil

2,4,5-T	ND	75	63	17.4	71	73	2.8	40 - 140	30	
2,4,5-TP (Silvex)	ND	90	83	8.1	85	84	1.2	40 - 140	30	
2,4-D	ND	74	64	14.5	77	84	8.7	40 - 140	30	
2,4-DB	ND	64	58	9.8	62	65	4.7	40 - 140	30	
Dalapon	ND	60	58	3.4	37	32	14.5	40 - 140	30	
Dicamba	ND	95	94	1.1	98	87	11.9	40 - 140	30	
Dichloroprop	ND	64	60	6.5	68	68	0.0	40 - 140	30	
Dinoseb	ND	43	22	64.6	32	40	22.2	40 - 140	30	l,r
% DCAA (Surrogate Rec)	67	70	66	5.9	67	67	0.0	30 - 150	30	

QA/QC Data

SDG I.D.: GBB74223

QA/QC Batch 199263, QC Sample No: BB74225 (BB74225)

Volatiles - Soil

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	99	103	4.0	86	80	7.2	70 - 130	30	
1,1,1-Trichloroethane	ND	101	104	2.9	93	94	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	94	96	2.1	97	77	23.0	70 - 130	30	
1,1,2-Trichloroethane	ND	105	104	1.0	83	77	7.5	70 - 130	30	
1,1-Dichloroethane	ND	99	102	3.0	90	88	2.2	70 - 130	30	
1,1-Dichloroethene	ND	96	97	1.0	86	90	4.5	70 - 130	30	
1,1-Dichloropropene	ND	105	105	0.0	91	93	2.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	100	99	1.0	47	48	2.1	70 - 130	30	m
1,2,3-Trichloropropane	ND	96	100	4.1	96	77	22.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	90	90	0.0	50	49	2.0	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	102	101	1.0	92	78	16.5	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	104	109	4.7	81	69	16.0	70 - 130	30	m
1,2-Dichlorobenzene	ND	95	94	1.1	70	61	13.7	70 - 130	30	m
1,2-Dichloroethane	ND	101	101	0.0	84	80	4.9	70 - 130	30	
1,2-Dichloropropane	ND	101	101	0.0	85	83	2.4	70 - 130	30	
1,3,5-Trimethylbenzene	ND	105	106	0.9	95	82	14.7	70 - 130	30	
1,3-Dichlorobenzene	ND	96	94	2.1	74	64	14.5	70 - 130	30	m
1,3-Dichloropropane	ND	101	103	2.0	87	78	10.9	70 - 130	30	
1,4-Dichlorobenzene	ND	93	92	1.1	70	62	12.1	70 - 130	30	m
2,2-Dichloropropane	ND	101	103	2.0	87	88	1.1	70 - 130	30	
2-Chlorotoluene	ND	101	103	2.0	90	77	15.6	70 - 130	30	
2-Hexanone	ND	90	90	0.0	42	40	4.9	70 - 130	30	m
2-Isopropyltoluene	ND	100	100	0.0	94	81	14.9	70 - 130	30	
4-Chlorotoluene	ND	97	99	2.0	86	73	16.4	70 - 130	30	
4-Methyl-2-pentanone	ND	99	99	0.0	76	74	2.7	70 - 130	30	
Acetone	ND	95	97	2.1	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	100	103	3.0	80	74	7.8	70 - 130	30	
Benzene	ND	101	102	1.0	85	86	1.2	70 - 130	30	
Bromobenzene	ND	103	104	1.0	83	68	19.9	70 - 130	30	m
Bromochloromethane	ND	103	107	3.8	88	82	7.1	70 - 130	30	
Bromodichloromethane	ND	101	101	0.0	82	80	2.5	70 - 130	30	
Bromoform	ND	101	104	2.9	77	71	8.1	70 - 130	30	
Bromomethane	ND	105	108	2.8	79	80	1.3	70 - 130	30	
Carbon Disulfide	ND	97	99	2.0	82	86	4.8	70 - 130	30	
Carbon tetrachloride	ND	106	106	0.0	92	95	3.2	70 - 130	30	
Chlorobenzene	ND	95	97	2.1	78	74	5.3	70 - 130	30	
Chloroethane	ND	104	104	0.0	87	87	0.0	70 - 130	30	
Chloroform	ND	101	102	1.0	88	86	2.3	70 - 130	30	
Chloromethane	ND	112	115	2.6	84	86	2.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	101	104	2.9	88	85	3.5	70 - 130	30	
cis-1,3-Dichloropropene	ND	101	101	0.0	78	75	3.9	70 - 130	30	
Dibromochloromethane	ND	100	103	3.0	84	77	8.7	70 - 130	30	
Dibromoethane	ND	104	105	1.0	80	75	6.5	70 - 130	30	
Dibromomethane	ND	104	105	1.0	85	79	7.3	70 - 130	30	
Dichlorodifluoromethane	ND	135	140	3.6	86	90	4.5	70 - 130	30	l
Ethylbenzene	ND	98	100	2.0	85	81	4.8	70 - 130	30	
Hexachlorobutadiene	ND	95	93	2.1	74	72	2.7	70 - 130	30	
Isopropylbenzene	ND	104	105	1.0	102	87	15.9	70 - 130	30	
m&p-Xylene	ND	98	99	1.0	83	81	2.4	70 - 130	30	
Methyl ethyl ketone	ND	93	95	2.1	40	<40	NC	70 - 130	30	m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	101	102	1.0	91	88	3.4	70 - 130	30	
Methylene chloride	ND	90	92	2.2	79	76	3.9	70 - 130	30	
Naphthalene	ND	109	112	2.7	56	51	9.3	70 - 130	30	m
n-Butylbenzene	ND	99	98	1.0	86	79	8.5	70 - 130	30	
n-Propylbenzene	ND	97	98	1.0	96	84	13.3	70 - 130	30	
o-Xylene	ND	99	99	0.0	83	80	3.7	70 - 130	30	
p-Isopropyltoluene	ND	105	104	1.0	94	83	12.4	70 - 130	30	
sec-Butylbenzene	ND	100	100	0.0	96	85	12.2	70 - 130	30	
Styrene	ND	99	99	0.0	75	72	4.1	70 - 130	30	
tert-Butylbenzene	ND	103	103	0.0	101	87	14.9	70 - 130	30	
Tetrachloroethene	ND	98	100	2.0	87	86	1.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	102	107	4.8	92	86	6.7	70 - 130	30	
Toluene	ND	102	102	0.0	82	82	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	100	3.0	87	88	1.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	102	103	1.0	76	72	5.4	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	110	112	1.8	78	63	21.3	70 - 130	30	m
Trichloroethene	ND	107	108	0.9	83	85	2.4	70 - 130	30	
Trichlorofluoromethane	ND	121	123	1.6	90	92	2.2	70 - 130	30	
Trichlorotrifluoroethane	ND	96	100	4.1	87	90	3.4	70 - 130	30	
Vinyl chloride	ND	111	114	2.7	87	92	5.6	70 - 130	30	
% 1,2-dichlorobenzene-d4	102	101	101	0.0	103	99	4.0	70 - 130	30	
% Bromofluorobenzene	97	100	100	0.0	95	101	6.1	70 - 130	30	
% Dibromofluoromethane	98	96	102	6.1	104	104	0.0	70 - 130	30	
% Toluene-d8	99	102	100	2.0	98	99	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198748, QC Sample No: BB74230 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	68	90	27.8	96	70	31.3	50 - 150	30	r
% n-Pentacosane	85	87	111	24.2	134	89	40.4	50 - 150	30	r

QA/QC Batch 198751, QC Sample No: BB74231 (BB74229, BB74230, BB74231)

Pesticides - Soil

4,4' -DDD	ND	74	75	1.3	76	90	16.9	40 - 140	30	
4,4' -DDE	ND	76	76	0.0	79	89	11.9	40 - 140	30	
4,4' -DDT	ND	72	70	2.8	74	83	11.5	40 - 140	30	
a-BHC	ND	81	79	2.5	83	96	14.5	40 - 140	30	
a-Chlordane	ND	72	74	2.7	74	88	17.3	40 - 140	30	
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
Aldrin	ND	76	75	1.3	78	90	14.3	40 - 140	30	
b-BHC	ND	75	78	3.9	82	91	10.4	40 - 140	30	
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
d-BHC	ND	77	76	1.3	82	93	12.6	40 - 140	30	
Dieldrin	ND	75	74	1.3	78	89	13.2	40 - 140	30	
Endosulfan I	ND	71	73	2.8	73	88	18.6	40 - 140	30	
Endosulfan II	ND	65	62	4.7	74	84	12.7	40 - 140	30	
Endosulfan sulfate	ND	63	64	1.6	71	80	11.9	40 - 140	30	
Endrin	ND	71	73	2.8	77	88	13.3	40 - 140	30	
Endrin aldehyde	ND	61	57	6.8	81	90	10.5	40 - 140	30	
Endrin ketone	ND	73	71	2.8	79	88	10.8	40 - 140	30	
g-BHC	ND	80	78	2.5	82	95	14.7	40 - 140	30	
g-Chlordane	ND	74	74	0.0	75	87	14.8	40 - 140	30	

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Heptachlor	ND	70	65	7.4	66	75	12.8	40 - 140	30	
Heptachlor epoxide	ND	75	74	1.3	77	89	14.5	40 - 140	30	
Methoxychlor	ND	73	70	4.2	81	86	6.0	40 - 140	30	
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30	
% DCBP	57	65	57	13.1	66	71	7.3	30 - 150	30	
% TCMX	58	74	69	7.0	68	78	13.7	30 - 150	30	
QA/QC Batch 198750, QC Sample No: BB74409 (BB74231)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	93	89	4.4	97	98	1.0	40 - 140	30	
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	99	95	4.1	144	135	6.5	40 - 140	30	m
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	99	90	87	3.4	103	91	12.4	30 - 150	30	
% TCMX (Surrogate Rec)	83	75	73	2.7	82	80	2.5	30 - 150	30	
QA/QC Batch 198747, QC Sample No: BB74409 (BB74231)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	44	44	0.0	43	46	6.7	30 - 130	30	
1,2,4-Trichlorobenzene	ND	69	68	1.5	68	71	4.3	30 - 130	30	
1,2-Dichlorobenzene	ND	68	70	2.9	70	73	4.2	30 - 130	30	
1,3-Dichlorobenzene	ND	66	67	1.5	65	68	4.5	30 - 130	30	
1,4-Dichlorobenzene	ND	67	68	1.5	67	70	4.4	30 - 130	30	
2,4,5-Trichlorophenol	ND	85	81	4.8	81	84	3.6	30 - 130	30	
2,4,6-Trichlorophenol	ND	84	79	6.1	81	88	8.3	30 - 130	30	
2,4-Dichlorophenol	ND	81	79	2.5	78	82	5.0	30 - 130	30	
2,4-Dimethylphenol	ND	64	63	1.6	66	70	5.9	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	84	82	2.4	73	69	5.6	30 - 130	30	
2,6-Dinitrotoluene	ND	84	81	3.6	75	74	1.3	30 - 130	30	
2-Chloronaphthalene	ND	79	77	2.6	80	85	6.1	30 - 130	30	
2-Chlorophenol	ND	75	76	1.3	77	83	7.5	30 - 130	30	
2-Methylnaphthalene	ND	73	74	1.4	78	83	6.2	30 - 130	30	
2-Methylphenol (o-cresol)	ND	77	77	0.0	81	89	9.4	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	84	82	2.4	89	83	7.0	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	84	84	0.0	88	93	5.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	64	66	3.1	18	26	36.4	30 - 130	30	m,r
3-Nitroaniline	ND	90	87	3.4	84	88	4.7	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	21	29	32.0	23	9.4	84.0	30 - 130	30	l,m,r
4-Bromophenyl phenyl ether	ND	80	81	1.2	73	77	5.3	30 - 130	30	
4-Chloro-3-methylphenol	ND	88	86	2.3	86	91	5.6	30 - 130	30	
4-Chloroaniline	ND	42	43	2.4	52	53	1.9	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	79	81	2.5	81	86	6.0	30 - 130	30	
4-Nitroaniline	ND	90	87	3.4	84	88	4.7	30 - 130	30	
4-Nitrophenol	ND	148	140	5.6	144	148	2.7	30 - 130	30	l,m
Acenaphthene	ND	77	76	1.3	80	84	4.9	30 - 130	30	
Acenaphthylene	ND	76	74	2.7	86	91	5.6	30 - 130	30	
Acetophenone	ND	40	41	2.5	43	45	4.5	30 - 130	30	

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Aniline	ND	58	60	3.4	27	39	36.4	30 - 130	30	m,r
Anthracene	ND	80	83	3.7	86	91	5.6	30 - 130	30	
Azobenzene	ND	44	44	0.0	45	47	4.3	30 - 130	30	
Benz(a)anthracene	ND	83	85	2.4	80	86	7.2	30 - 130	30	
Benzidine	ND	55	64	15.1	<5	<5	NC	30 - 130	30	m
Benzo(a)pyrene	ND	77	80	3.8	71	77	8.1	30 - 130	30	
Benzo(b)fluoranthene	ND	84	85	1.2	84	99	16.4	30 - 130	30	
Benzo(ghi)perylene	ND	89	90	1.1	54	39	32.3	30 - 130	30	r
Benzo(k)fluoranthene	ND	80	86	7.2	103	114	10.1	30 - 130	30	
Benzyl butyl phthalate	ND	86	84	2.4	82	90	9.3	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	76	76	0.0	79	83	4.9	30 - 130	30	
Bis(2-chloroethyl)ether	ND	58	58	0.0	61	63	3.2	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	77	79	2.6	87	91	4.5	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	83	85	2.4	87	94	7.7	30 - 130	30	
Carbazole	ND	125	128	2.4	124	129	4.0	30 - 130	30	
Chrysene	ND	81	84	3.6	78	85	8.6	30 - 130	30	
Dibenz(a,h)anthracene	ND	86	91	5.6	68	59	14.2	30 - 130	30	
Dibenzofuran	ND	79	78	1.3	80	84	4.9	30 - 130	30	
Diethyl phthalate	ND	81	80	1.2	79	83	4.9	30 - 130	30	
Dimethylphthalate	ND	81	79	2.5	78	83	6.2	30 - 130	30	
Di-n-butylphthalate	ND	78	81	3.8	79	84	6.1	30 - 130	30	
Di-n-octylphthalate	ND	82	85	3.6	83	87	4.7	30 - 130	30	
Fluoranthene	ND	80	84	4.9	84	90	6.9	30 - 130	30	
Fluorene	ND	80	81	1.2	84	89	5.8	30 - 130	30	
Hexachlorobenzene	ND	81	84	3.6	81	85	4.8	30 - 130	30	
Hexachlorobutadiene	ND	70	69	1.4	70	74	5.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	85	76	11.2	<5	<5	NC	30 - 130	30	m
Hexachloroethane	ND	67	68	1.5	65	55	16.7	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	87	91	4.5	61	49	21.8	30 - 130	30	
Isophorone	ND	79	79	0.0	81	85	4.8	30 - 130	30	
Naphthalene	ND	73	76	4.0	76	80	5.1	30 - 130	30	
Nitrobenzene	ND	78	80	2.5	83	87	4.7	30 - 130	30	
N-Nitrosodimethylamine	ND	72	67	7.2	58	59	1.7	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	94	95	1.1	95	99	4.1	30 - 130	30	
N-Nitrosodiphenylamine	ND	92	90	2.2	87	91	4.5	30 - 130	30	
Pentachloronitrobenzene	ND	82	87	5.9	82	79	3.7	30 - 130	30	
Pentachlorophenol	ND	85	86	1.2	100	108	7.7	30 - 130	30	
Phenanthrene	ND	81	84	3.6	77	84	8.7	30 - 130	30	
Phenol	ND	75	76	1.3	78	82	5.0	30 - 130	30	
Pyrene	ND	82	86	4.8	87	92	5.6	30 - 130	30	
Pyridine	ND	29	26	10.9	22	22	0.0	30 - 130	30	l,m
% 2,4,6-Tribromophenol	101	102	104	1.9	107	115	7.2	15 - 130	30	
% 2-Fluorobiphenyl	72	71	70	1.4	73	78	6.6	30 - 130	30	
% 2-Fluorophenol	77	75	76	1.3	80	83	3.7	15 - 130	30	
% Nitrobenzene-d5	83	76	78	2.6	82	86	4.8	30 - 130	30	
% Phenol-d5	78	74	76	2.7	80	84	4.9	15 - 130	30	
% Terphenyl-d14	96	93	99	6.3	92	96	4.3	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

QA/QC Data

SDG I.D.: GBB74223

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 26, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB74223

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB74223	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB74224	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB74225	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	360	140	140	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2300	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2300	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1400	250	1000	1000	ug/Kg
BB74226	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1400	250	1000	1000	ug/Kg
BB74227	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	430	140	140	ug/Kg
BB74227	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1300	1200	1200	ug/Kg
BB74228	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB74229	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	390	140	140	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	4100	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3200	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1900	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1900	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	250	1000	1000	ug/Kg
BB74230	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.201	0.010	0.15	0.15	mg/L
BB74231	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	420	140	140	ug/Kg
BB74231	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.212	0.010	0.15	0.15	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH CATENARY PR **Project Number:**

Laboratory Sample ID(s): BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231, BB74232

Sampling Date(s): 4/18/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, ICP Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Thursday, April 26, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine and Aniline reporting levels do not meet GBPM criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Aufid3 04/20/12-2 (BB74231)

Initial Calibration (AU-FID3 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/20/2012

Instrument: Au-fid84 04/20/12-1 (BB74223)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/20/2012

Instrument: Au-fid84 04/20/12-2 (BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/20/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

QC (Site Specific)

---------- Sample No: BB74230, QA/QC Batch: 198748 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: % n-Pentacosane(40.4%), Ext. Petroleum HC(31.3%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198754 (Samples: BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231): -----

The LCS and/or LCSD recoveries for one or more analytes is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dinoseb)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Dinoseb)

Instrument: Au-ecd14 04/20/12-1 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

Initial Calibration ECD14-041812
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/20/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

QC (Site Specific)

---------- Sample No: BB74225, QA/QC Batch: 198754 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: Dinoseb(22%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Dinoseb(64.6%)

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB72484, QA/QC Batch: 198554 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198757 (Samples: BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231): -----

The LCS and/or LCSD recovery for one or more analytes is above the upper range, therefore a slight high bias is possible. (Lead)

Instrument: Icp9 04/19/12-1 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/19/2012

Instrument: Icp9 04/20/12-1 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

The initial calibration met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/20/2012

Instrument: Icp9 04/23/12-1 (BB74228, BB74229, BB74230, BB74231)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/23/2012

Instrument: Icp9 04/24/12-1 (BB74228, BB74229, BB74230, BB74231)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/24/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

QC (Site Specific)

---------- Sample No: BB74228, QA/QC Batch: 199052 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB54292, QA/QC Batch: 198603 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB73743, QA/QC Batch: 198757 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: Lead(>130%)

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd8 04/20/12-1 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/20/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

QC (Batch Specific)

---------- Sample No: BB73875, QA/QC Batch: 198669 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB74409, QA/QC Batch: 198750 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/20/12-1 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Mark Rochette
Position: Chemist
Date: 4/20/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

QC (Site Specific)

---------- Sample No: BB74231, QA/QC Batch: 198751 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 30 - 150 with the following exceptions: None.

All MSD recoveries were within 30 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB73581, QA/QC Batch: 198651 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198666 (Samples: BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230): -----

One or more analytes is below the criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, Pyridine)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline)

QC Batch 198747 (Samples: BB74231): -----

The LCS and/or LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pyridine)

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 4-Nitrophenol)

Instrument: Chem12 04/19/12-2 (BB74223, BB74224, BB74225, BB74226, BB74227, BB74228, BB74229, BB74230, BB74231)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

Initial Calibration (Chem12/SV_0417):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene, % 2,4,6-tribromophenol

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Aniline, N-Nitrosodi-n-propylamine, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol, 2-Nitroaniline, Pentachlorophenol

Printed Name Damien Drobinski
Position: Chemist
Date: 4/19/2012

QC (Batch Specific)

---------- Sample No: BB73875, QA/QC Batch: 198666 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pyridine(21%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(7.7%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), 4-Chloroaniline(>150%), Pyridine(21%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB74409, QA/QC Batch: 198747 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(21%), 4-Nitrophenol(148%), Pyridine(29%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 4,6-Dinitro-2-methylphenol(29%), 4-Nitrophenol(140%), Pyridine(26%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(32.0%)

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198967 (Samples: BB74223, BB74224, BB74226, BB74228, BB74229, BB74230, BB74231, BB74232): -----

The LCS and/or LCSD recoveries for one or more analytes are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Chloroethane)

QC Batch 199065 (Samples: BB74227): -----

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (1,2,4-Trichlorobenzene)

Instrument: Chem03 04/19/12-2 (BB74225)

Initial Calibration Verification (RCPS_0417):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: None.

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Acrolein, Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 4/19/2012

Instrument: Chem11 04/19/12-2 (BB74223, BB74224, BB74226, BB74228, BB74229, BB74230, BB74231, BB74232)

Initial Calibration Verification (CHEM11/RCPS_0419):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: None.

Printed Name Johanna Harrington
Position: Chemist
Date: 4/19/2012

Instrument: Chem11 04/20/12-2 (BB74227)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 26, 2012

SDG I.D.: GBB74223

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Acrolein, Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 4/20/2012

QC (Site Specific)

---------- Sample No: BB74225, QA/QC Batch: 199263 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Dichlorodifluoromethane(135%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Dichlorodifluoromethane(140%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(47%), 1,2,4-Trichlorobenzene(50%), 2-Hexanone(42%), Acetone(<40%), Methyl ethyl ketone(40%), Naphthalene(56%)

All MSD recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(48%), 1,2,4-Trichlorobenzene(49%), 1,2-Dibromo-3-chloropropane(69%), 1,2-Dichlorobenzene(61%), 1,3-Dichlorobenzene(64%), 1,4-Dichlorobenzene(62%), 2-Hexanone(40%), Acetone(<40%), Bromobenzene(68%), Methyl ethyl ketone(<40%), Naphthalene(51%), trans-1,4-dichloro-2-butene(63%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB73715, QA/QC Batch: 198967 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Chloroethane(65%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Chloroethane(53.9%)

---------- Sample No: BB73743, QA/QC Batch: 199065 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 1,2,4-Trichlorobenzene(132%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6° Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-18-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	PCBs + Pesticides 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals	Soil VOA Vials (1 methanol 2 H2O)	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
74223	GP-56 3'-5'	S	4-18-12	1:19pm	X	X	X	X	X	X	X						3	2			
74224	GP-57 3'-5'			1:00pm																	
74225	GP-58 3'-5'			12:42pm																	
74226	GP-59 3'-5'			12:21pm																	
74227	GP-60 3'-5'			11:57am																	
74228	GP-61 1'-3'			11:31am																	
74229	GP-62 6'-8'			11:09am																	
74230	GP-63 3'-5'			10:43am																	
74231	GP-64 3'-5'			10:24am																	
74232	TB-7			-													2				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4-19-12	11:45
[signature]	[signature]	4/19/12	12:10

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Monday, April 16, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH CANTENARY PROJECT
Sample ID#s: BB62580 - BB62586

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	7:50
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62580

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-9 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/07/12		LK	6010
Arsenic	0.014	0.004	mg/L	04/07/12		LK	6010
Barium	0.103	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	0.019	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.046	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead	0.012	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	04/07/12		JRB	SW8151

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-9 GW

Phoenix I.D.: BB62580

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	12	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	86		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/09/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/09/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	69		%	04/09/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/10/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	40		%	04/10/12		MH	30 - 150 %
% TCMX	65		%	04/10/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-9 GW

Phoenix I.D.: BB62580

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	50		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	65		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/06/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/06/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/06/12		H/T	SW8260
Acetone	ND	25	ug/L	04/06/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/06/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/06/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/06/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/06/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/06/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/06/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/06/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/06/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/06/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/06/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/06/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/06/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/06/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/06/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/06/12		H/T	70 - 130 %
% Bromofluorobenzene	93		%	04/06/12		H/T	70 - 130 %
% Dibromofluoromethane	97		%	04/06/12		H/T	70 - 130 %
% Toluene-d8	100		%	04/06/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-9 GW

Phoenix I.D.: BB62580

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	04/07/12		DD	15 - 130 %
% Phenol-d5	71		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.09	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT

Phoenix I.D.: BB62580

Client ID: GP-9 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	0.08	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	79		%	04/06/12		DD	15 - 130 %
% Phenol-d5	71		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/06/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 16, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	8:49
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62581

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-13 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/07/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/07/12		LK	6010
Barium	0.049	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.047	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.00015	0.00015	mg/L	04/06/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/09/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/09/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	59		%	04/09/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/10/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	49		%	04/10/12		MH	30 - 150 %
% TCMX	59		%	04/10/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-13 GW

Phoenix I.D.: BB62581

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	56		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	57		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/06/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/06/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/06/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/06/12		H/T	SW8260
Acetone	ND	25	ug/L	04/06/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/06/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/06/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/06/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/06/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/06/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/06/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/06/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/06/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/06/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/06/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/06/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/06/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/06/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/06/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/06/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/06/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/06/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/06/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/06/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/06/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/06/12		H/T	70 - 130 %
% Bromofluorobenzene	93		%	04/06/12		H/T	70 - 130 %
% Dibromofluoromethane	96		%	04/06/12		H/T	70 - 130 %
% Toluene-d8	99		%	04/06/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-13 GW

Phoenix I.D.: BB62581

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	97		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	66		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/07/12		DD	15 - 130 %
% Phenol-d5	67		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	91		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-13 GW

Phoenix I.D.: BB62581

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	97		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	66		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/06/12		DD	15 - 130 %
% Phenol-d5	67		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	91		%	04/06/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 16, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	9:55
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62582

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-15 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.01	0.01	mg/L	04/10/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/07/12		LK	6010
Barium	< 0.002	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.01	0.01	mg/L	04/10/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.023	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	75		%	04/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/10/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/10/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	58		%	04/10/12		MH	30 - 150 %
% TCMX	68		%	04/10/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-15 GW

Phoenix I.D.: BB62582

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	77		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	61		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	04/09/12		H/P	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,2-Dichloroethane	ND	0.6	ug/L	04/09/12		H/P	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/09/12		H/P	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/P	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/P	SW8260
2-Hexanone	ND	5	ug/L	04/09/12		H/P	SW8260
2-Isopropyltoluene	ND	1	ug/L	04/09/12		H/P	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/P	SW8260
4-Methyl-2-pentanone	ND	5	ug/L	04/09/12		H/P	SW8260
Acetone	ND	25	ug/L	04/09/12		H/P	SW8260
Acrylonitrile	ND	5	ug/L	04/09/12		H/P	SW8260
Benzene	ND	0.7	ug/L	04/09/12		H/P	SW8260
Bromobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Bromochloromethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Bromodichloromethane	ND	0.5	ug/L	04/09/12		H/P	SW8260
Bromoform	ND	1.0	ug/L	04/09/12		H/P	SW8260
Bromomethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Carbon Disulfide	ND	5	ug/L	04/09/12		H/P	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/09/12		H/P	SW8260
Chlorobenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Chloroethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Chloroform	ND	1.0	ug/L	04/09/12		H/P	SW8260
Chloromethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/P	SW8260
cis-1,3-Dichloropropene	ND	0.5	ug/L	04/09/12		H/P	SW8260
Dibromochloromethane	ND	0.5	ug/L	04/09/12		H/P	SW8260
Dibromoethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Dibromomethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/09/12		H/P	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Hexachlorobutadiene	ND	0.4	ug/L	04/09/12		H/P	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
m&p-Xylene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Methyl ethyl ketone	ND	5	ug/L	04/09/12		H/P	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/09/12		H/P	SW8260
Methylene chloride	ND	1.0	ug/L	04/09/12		H/P	SW8260
Naphthalene	ND	1.0	ug/L	04/09/12		H/P	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
o-Xylene	ND	1.0	ug/L	04/09/12		H/P	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/P	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Styrene	ND	1.0	ug/L	04/09/12		H/P	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Tetrahydrofuran (THF)	ND	5	ug/L	04/09/12		H/P	SW8260
Toluene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Total Xylenes	ND	2.0	ug/L	04/09/12		H/P	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/P	SW8260
trans-1,3-Dichloropropene	ND	0.5	ug/L	04/09/12		H/P	SW8260
trans-1,4-dichloro-2-butene	ND	5	ug/L	04/09/12		H/P	SW8260
Trichloroethene	ND	1.0	ug/L	04/09/12		H/P	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/09/12		H/P	SW8260
Trichlorotrifluoroethane	ND	1	ug/L	04/09/12		H/P	SW8260
Vinyl chloride	ND	1.0	ug/L	04/09/12		H/P	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/09/12		H/P	70 - 130 %
% Bromofluorobenzene	91		%	04/09/12		H/P	70 - 130 %
% Dibromofluoromethane	101		%	04/09/12		H/P	70 - 130 %
% Toluene-d8	98		%	04/09/12		H/P	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-15 GW

Phoenix I.D.: BB62582

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	106		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	04/07/12		DD	15 - 130 %
% Phenol-d5	67		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-15 GW

Phoenix I.D.: BB62582

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	106		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	76		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	04/06/12		DD	15 - 130 %
% Phenol-d5	67		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/06/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 16, 2012
Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	11:24
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62583

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-16 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/07/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/07/12		LK	6010
Barium	0.016	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	0.001	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.015	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.00015	0.00015	mg/L	04/06/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	04/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	12	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	84		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	58		%	04/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	45		%	04/11/12		MH	30 - 150 %
% TCMX	58		%	04/11/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.15	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.013	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.5	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.1	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	1.0	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-16 GW

Phoenix I.D.: BB62583

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	49		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	60		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/09/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Acetone	ND	25	ug/L	04/09/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/09/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/09/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/09/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/09/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/09/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/09/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/09/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/09/12		H/T	70 - 130 %
% Bromofluorobenzene	91		%	04/09/12		H/T	70 - 130 %
% Dibromofluoromethane	105		%	04/09/12		H/T	70 - 130 %
% Toluene-d8	101		%	04/09/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-16 GW

Phoenix I.D.: BB62583

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	04/07/12		DD	15 - 130 %
% Phenol-d5	71		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT

Phoenix I.D.: BB62583

Client ID: GP-16 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	80		%	04/06/12		DD	15 - 130 %
% Phenol-d5	71		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/06/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference from non target compounds in the sample, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 16, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	13:11
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62584

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-18 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/07/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/07/12		LK	6010
Barium	0.015	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	0.002	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.017	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/07/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	47		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	57		%	04/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	52		%	04/11/12		MH	30 - 150 %
% TCMX	68		%	04/11/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.15	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.013	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.005	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.5	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.2	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	1.0	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-18 GW

Phoenix I.D.: BB62584

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	51		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	61		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/09/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Acetone	ND	25	ug/L	04/09/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/09/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/09/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/09/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/09/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/09/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/09/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/09/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/09/12		H/T	70 - 130 %
% Bromofluorobenzene	92		%	04/09/12		H/T	70 - 130 %
% Dibromofluoromethane	103		%	04/09/12		H/T	70 - 130 %
% Toluene-d8	99		%	04/09/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-18 GW

Phoenix I.D.: BB62584

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	62		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/07/12		DD	15 - 130 %
% Phenol-d5	62		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-18 GW

Phoenix I.D.: BB62584

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	62		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/06/12		DD	15 - 130 %
% Phenol-d5	62		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/06/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference from non target compounds in the sample, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 16, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	14:47
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62585

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-19 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/07/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/07/12		LK	6010
Barium	0.016	0.002	mg/L	04/07/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/07/12		LK	6010
Chromium	0.002	0.001	mg/L	04/07/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/06/12		EK	6010
Barium (Dissolved)	0.031	0.002	mg/L	04/06/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/06/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/06/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/06/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/06/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/07/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/07/12		LK	6010
Dissolved Metals Preparation	Completed			04/05/12		AG	SW846-3005
Total Metals Digestion	Completed			04/05/12		AG	
Extraction of CT ETPH	Completed			04/06/12		F/D	3510/3520
Dissolved Mercury Digestion	Completed			04/06/12		X/X	SW7470
Mercury Digestion	Completed			04/06/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/06/12		D/D	SW8151
PCB Extraction	Completed			04/06/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/06/12		L	SW3510
Semi-Volatile Extraction	Completed			04/05/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/07/12		JRB	SW8151

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-19 GW

Phoenix I.D.: BB62585

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/07/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/07/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/07/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/07/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/07/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	92		%	04/07/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/10/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/10/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	56		%	04/10/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	46		%	04/11/12		MH	30 - 150 %
% TCMX	65		%	04/11/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.15	ug/L	04/10/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/10/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/10/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/10/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/10/12		MR	SW8081
b-BHC	ND	0.013	ug/L	04/10/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/10/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/10/12		MR	SW8081
Dieldrin	ND	0.004	ug/L	04/10/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/10/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/10/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/10/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/10/12		MR	SW8081
Endrin ketone	ND	0.5	ug/L	04/10/12		MR	SW8081
g-BHC (Lindane)	ND	0.2	ug/L	04/10/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/10/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/10/12		MR	SW8081
Methoxychlor	ND	1.0	ug/L	04/10/12		MR	SW8081

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-19 GW

Phoenix I.D.: BB62585

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1	ug/L	04/10/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	49		%	04/10/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	62		%	04/10/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/09/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Acetone	ND	25	ug/L	04/09/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/09/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/09/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/09/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/09/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/09/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/09/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/09/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/09/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/09/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/09/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/09/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/09/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/09/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/09/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/09/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/09/12		H/T	70 - 130 %
% Bromofluorobenzene	90		%	04/09/12		H/T	70 - 130 %
% Dibromofluoromethane	104		%	04/09/12		H/T	70 - 130 %
% Toluene-d8	99		%	04/09/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/07/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/07/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/07/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/07/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/07/12		DD	SW8270

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: GP-19 GW

Phoenix I.D.: BB62585

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/07/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/07/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/07/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/07/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/07/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/07/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/07/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/07/12		DD	SW8270
Aniline	ND	10	ug/L	04/07/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/07/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
Benzidine	ND	50	ug/L	04/07/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/07/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/07/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/07/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/07/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/07/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/07/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/07/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/07/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/07/12		DD	SW8270
Phenol	ND	10	ug/L	04/07/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/07/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/07/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/07/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	04/07/12		DD	15 - 130 %
% 2-Fluorophenol	62		%	04/07/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/07/12		DD	15 - 130 %
% Phenol-d5	61		%	04/07/12		DD	15 - 130 %
% Terphenyl-d14	82		%	04/07/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.06	0.040	ug/L	04/06/12		DD	SW8270 (SIM)

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: GP-19 GW

Phoenix I.D.: BB62585

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/06/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/06/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/06/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/06/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/06/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/06/12		DD	SW8270 (SIM)
Phenanthrene	0.08	0.050	ug/L	04/06/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	75		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	62		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/06/12		DD	15 - 130 %
% Phenol-d5	61		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	82		%	04/06/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference from non target compounds in the sample, an elevated RL was reported. l.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 16, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 16, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/04/12	0:00
Location Code:	MAGU-NH	Received by:	LB	04/05/12	14:35
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB62580
Phoenix ID: BB62586

Project ID: METRO NORTH CANTENARY PROJECT

Client ID: TB-1

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/07/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/07/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/07/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/07/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/07/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/07/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/07/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/07/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/07/12		H/T	SW8260
Acetone	ND	25	ug/L	04/07/12		H/T	SW8260

Project ID: METRO NORTH CANTENARY PROJECT
Client ID: TB-1

Phoenix I.D.: BB62586

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	04/07/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/07/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/07/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/07/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/07/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/07/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/07/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/07/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/07/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/07/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/07/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/07/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/07/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/07/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/07/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/07/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/07/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/07/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/07/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/07/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/07/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/07/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/07/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/07/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/07/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/07/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/07/12		H/T	70 - 130 %
% Bromofluorobenzene	89		%	04/07/12		H/T	70 - 130 %
% Dibromofluoromethane	94		%	04/07/12		H/T	70 - 130 %
% Toluene-d8	96		%	04/07/12		H/T	70 - 130 %

Project ID: METRO NORTH CANTENARY PROJECT

Phoenix I.D.: BB62586

Client ID: TB-1

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 16, 2012

Reviewed and Released by: Maryam Taylor, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 16, 2012

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 197783, QC Sample No: BB62487 (BB62580)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	99.3	101	1.7	98.4	100	1.6	75 - 125	20
Barium	BDL	0.010	0.010	0	99.8	101	1.2	99.3	101	1.7	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	103	104	1.0	103	104	1.0	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	101	102	1.0	100	102	2.0	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	102	103	1.0	101	102	1.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	94.5	95.5	1.1	93.3	94.9	1.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	98.4	98.7	0.3	97.6	98.6	1.0	75 - 125	20
QA/QC Batch 197764, QC Sample No: BB62580 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)												
ICP Metals - Dissolved												
Arsenic	BDL	<0.004	<0.004	NC	89.5	92.8	3.6	94.7	94.6	0.1	75 - 125	20
Barium	BDL	0.046	0.045	2.20	93.0	96.1	3.3	96.6	96.1	0.5	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	89.2	91.9	3.0	92.4	93.1	0.8	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	93.2	96.0	3.0	96.9	96.9	0.0	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	94.0	96.6	2.7	96.8	97.4	0.6	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	83.2	86.6	4.0	89.0	88.4	0.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	91.1	93.9	3.0	83.6	83.5	0.1	75 - 125	20
QA/QC Batch 197794, QC Sample No: BB62655 (BB62581, BB62582, BB62583, BB62584, BB62585)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	98.7	98.1	0.6	99.7	102	2.3	75 - 125	20
Barium	BDL	0.083	0.084	1.20	101	100	1.0	99.1	101	1.9	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	102	101	1.0	101	102	1.0	75 - 125	20
Chromium	BDL	0.005	0.006	18.2	101	99.7	1.3	99.5	102	2.5	75 - 125	20
Lead	BDL	0.003	<0.002	NC	101	99.8	1.2	100	103	3.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	92.9	93.7	0.9	95.2	96.8	1.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	98.1	97.4	0.7	101	103	2.0	75 - 125	20
QA/QC Batch 197805, QC Sample No: BB62834 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	107	103	3.8	97.8	103	5.2	70 - 130	20

Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 16, 2012

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 197777, QC Sample No: BB61059 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)									
TPH by GC (Extractable Products) - Ground Water									
Ext. Petroleum HC	ND	85	80	6.1				50 - 150	20
% n-Pentacosane	75	55	53	3.7				50 - 150	20
QA/QC Batch 197709, QC Sample No: BB61708 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)									
Pesticides - Ground Water									
4,4' -DDD	ND	87	83	4.7				40 - 140	20
4,4' -DDE	ND	86	81	6.0				40 - 140	20
4,4' -DDT	ND	92	87	5.6				40 - 140	20
a-BHC	ND	83	77	7.5				40 - 140	20
a-Chlordane	ND	83	78	6.2				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	77	72	6.7				40 - 140	20
b-BHC	ND	83	78	6.2				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	83	78	6.2				40 - 140	20
Dieldrin	ND	83	79	4.9				40 - 140	20
Endosulfan I	ND	84	78	7.4				40 - 140	20
Endosulfan II	ND	86	81	6.0				40 - 140	20
Endosulfan sulfate	ND	84	80	4.9				40 - 140	20
Endrin	ND	82	78	5.0				40 - 140	20
Endrin aldehyde	ND	83	76	8.8				40 - 140	20
Endrin ketone	ND	90	85	5.7				40 - 140	20
g-BHC	ND	80	76	5.1				40 - 140	20
g-Chlordane	ND	80	75	6.5				40 - 140	20
Heptachlor	ND	90	84	6.9				40 - 140	20
Heptachlor epoxide	ND	79	74	6.5				40 - 140	20
Methoxychlor	ND	102	96	6.1				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	88	93	88	5.5				30 - 150	20
% TCMX	69	80	75	6.5				30 - 150	20
QA/QC Batch 197713, QC Sample No: BB62185 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)									
Polychlorinated Biphenyls - Ground Water									
PCB-1016	ND	81	81	0.0	83	83	0.0	40 - 140	20
PCB-1221	ND							40 - 140	20
PCB-1232	ND							40 - 140	20
PCB-1242	ND							40 - 140	20
PCB-1248	ND							40 - 140	20
PCB-1254	ND							40 - 140	20
PCB-1260	ND	76	77	1.3	82	82	0.0	40 - 140	20
PCB-1262	ND							40 - 140	20
PCB-1268	ND							40 - 140	20

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% DCBP (Surrogate Rec)	91	85	86	1.2	84	86	2.4	30 - 150	20	
% TCMX (Surrogate Rec)	74	78	77	1.3	80	77	3.8	30 - 150	20	
QA/QC Batch 197833, QC Sample No: BB62580 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)										
Chlorinated Herbicides - Ground Water										
2,4,5-T	ND	121	97	22.0				40 - 140	20	r
2,4,5-TP (Silvex)	ND	102	95	7.1				40 - 140	20	
2,4-D	ND	107	105	1.9				40 - 140	20	
2,4-DB	ND	97	104	7.0				40 - 140	20	
Dalapon	ND	84	83	1.2				40 - 140	20	
Dicamba	ND	97	102	5.0				40 - 140	20	
Dichloroprop	ND	81	88	8.3				40 - 140	20	
Dinoseb	ND	67	67	0.0				40 - 140	20	
% DCAA (Surrogate Rec)	79	86	86	0.0				30 - 150	20	
QA/QC Batch 197774, QC Sample No: BB62580 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)										
Semivolatiles - Ground Water										
1,2,4,5-Tetrachlorobenzene	ND	54	58	7.1				30 - 130	20	
1,2,4-Trichlorobenzene	ND	68	74	8.5				30 - 130	20	
1,2-Dichlorobenzene	ND	70	77	9.5				30 - 130	20	
1,3-Dichlorobenzene	ND	67	74	9.9				30 - 130	20	
1,4-Dichlorobenzene	ND	70	77	9.5				30 - 130	20	
2,4,5-Trichlorophenol	ND	83	84	1.2				30 - 130	20	
2,4,6-Trichlorophenol	ND	87	88	1.1				30 - 130	20	
2,4-Dichlorophenol	ND	81	86	6.0				30 - 130	20	
2,4-Dimethylphenol	ND	40	43	7.2				30 - 130	20	
2,4-Dinitrophenol	ND	61	33	59.6				30 - 130	20	r
2,4-Dinitrotoluene	ND	88	89	1.1				30 - 130	20	
2,6-Dinitrotoluene	ND	83	85	2.4				30 - 130	20	
2-Chloronaphthalene	ND	77	82	6.3				30 - 130	20	
2-Chlorophenol	ND	69	75	8.3				30 - 130	20	
2-Methylnaphthalene	ND	73	78	6.6				30 - 130	20	
2-Methylphenol (o-cresol)	ND	76	90	16.9				30 - 130	20	
2-Nitroaniline	ND	>150	>150	NC				30 - 130	20	l
2-Nitrophenol	ND	76	80	5.1				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	74	79	6.5				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	87	88	1.1				30 - 130	20	
4,6-Dinitro-2-methylphenol	ND	89	74	18.4				30 - 130	20	
4-Bromophenyl phenyl ether	ND	80	83	3.7				30 - 130	20	
4-Chloro-3-methylphenol	ND	85	88	3.5				30 - 130	20	
4-Chloroaniline	ND	69	75	8.3				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	85	89	4.6				30 - 130	20	
4-Nitroaniline	ND	87	88	1.1				30 - 130	20	
4-Nitrophenol	ND	74	59	22.6				30 - 130	20	r
Acenaphthene	ND	78	84	7.4				30 - 130	20	
Acenaphthylene	ND	77	82	6.3				30 - 130	20	
Acetophenone	ND	51	55	7.5				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	84	88	4.7				30 - 130	20	
Azobenzene	ND	55	58	5.3				30 - 130	20	
Benz(a)anthracene	ND	103	103	0.0				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	86	86	0.0				30 - 130	20	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benzo(b)fluoranthene	ND	90	90	0.0				30 - 130	20	
Benzo(ghi)perylene	ND	88	85	3.5				30 - 130	20	
Benzo(k)fluoranthene	ND	100	91	9.4				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	89	89	0.0				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	75	81	7.7				30 - 130	20	
Bis(2-chloroethyl)ether	ND	62	67	7.8				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	77	84	8.7				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	103	106	2.9				30 - 130	20	
Carbazole	ND	>150	>150	NC				30 - 130	20	I
Chrysene	ND	93	93	0.0				30 - 130	20	
Dibenz(a,h)anthracene	ND	90	95	5.4				30 - 130	20	
Dibenzofuran	ND	79	84	6.1				30 - 130	20	
Diethyl phthalate	ND	89	93	4.4				30 - 130	20	
Dimethylphthalate	ND	83	87	4.7				30 - 130	20	
Di-n-butylphthalate	ND	99	102	3.0				30 - 130	20	
Di-n-octylphthalate	ND	97	98	1.0				30 - 130	20	
Fluoranthene	ND	94	95	1.1				30 - 130	20	
Fluorene	ND	86	90	4.5				30 - 130	20	
Hexachlorobenzene	ND	83	88	5.8				30 - 130	20	
Hexachlorobutadiene	ND	71	77	8.1				30 - 130	20	
Hexachlorocyclopentadiene	ND	25	22	12.8				30 - 130	20	I
Hexachloroethane	ND	69	77	11.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	90	94	4.3				30 - 130	20	
Isophorone	ND	61	65	6.3				30 - 130	20	
Naphthalene	ND	77	83	7.5				30 - 130	20	
Nitrobenzene	ND	75	80	6.5				30 - 130	20	
N-Nitrosodimethylamine	ND	58	58	0.0				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	79	84	6.1				30 - 130	20	
N-Nitrosodiphenylamine	ND	95	98	3.1				30 - 130	20	
Pentachloronitrobenzene	ND	120	126	4.9				30 - 130	20	
Pentachlorophenol	ND	52	23	77.3				30 - 130	20	I,r
Phenanthrene	ND	88	93	5.5				30 - 130	20	
Phenol	ND	78	79	1.3				30 - 130	20	
Pyrene	ND	96	97	1.0				30 - 130	20	
Pyridine	ND	13	<5	NC				30 - 130	20	I
% 2,4,6-Tribromophenol	95	89	93	4.4				15 - 130	20	
% 2-Fluorobiphenyl	70	69	76	9.7				30 - 130	20	
% 2-Fluorophenol	71	59	64	8.1				15 - 130	20	
% Nitrobenzene-d5	76	70	77	9.5				30 - 130	20	
% Phenol-d5	19	62	65	4.7				15 - 130	20	
% Terphenyl-d14	87	104	107	2.8				30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 197941, QC Sample No: BB62586 (BB62586)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	114	114	0.0	116	109	6.2	70 - 130	30
1,1,1-Trichloroethane	ND	102	102	0.0	105	102	2.9	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	102	102	0.0	101	102	1.0	70 - 130	30
1,1,2-Trichloroethane	ND	96	94	2.1	92	88	4.4	70 - 130	30
1,1-Dichloroethane	ND	97	97	0.0	97	94	3.1	70 - 130	30

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethene	ND	97	96	1.0	98	101	3.0	70 - 130	30	
1,1-Dichloropropene	ND	102	105	2.9	102	103	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	91	95	4.3	79	87	9.6	70 - 130	30	
1,2,3-Trichloropropane	ND	91	93	2.2	95	94	1.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	94	97	3.1	87	94	7.7	70 - 130	30	
1,2,4-Trimethylbenzene	ND	105	107	1.9	108	106	1.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	84	88	4.7	77	79	2.6	70 - 130	30	
1,2-Dichlorobenzene	ND	97	96	1.0	100	99	1.0	70 - 130	30	
1,2-Dichloroethane	ND	98	97	1.0	99	96	3.1	70 - 130	30	
1,2-Dichloropropane	ND	107	110	2.8	107	106	0.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	106	107	0.9	105	107	1.9	70 - 130	30	
1,3-Dichlorobenzene	ND	98	99	1.0	102	103	1.0	70 - 130	30	
1,3-Dichloropropane	ND	100	102	2.0	98	98	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	92	92	0.0	95	94	1.1	70 - 130	30	
2,2-Dichloropropane	ND	78	77	1.3	65	65	0.0	70 - 130	30	m
2-Chlorotoluene	ND	105	106	0.9	104	107	2.8	70 - 130	30	
2-Hexanone	ND	87	89	2.3	82	84	2.4	70 - 130	30	
2-Isopropyltoluene	ND	101	100	1.0	107	105	1.9	70 - 130	30	
4-Chlorotoluene	ND	101	100	1.0	105	106	0.9	70 - 130	30	
4-Methyl-2-pentanone	ND	88	85	3.5	80	80	0.0	70 - 130	30	
Acetone	ND	104	90	14.4	93	102	9.2	70 - 130	30	
Acrylonitrile	ND	93	91	2.2	93	89	4.4	70 - 130	30	
Benzene	ND	98	99	1.0	97	95	2.1	70 - 130	30	
Bromobenzene	ND	98	100	2.0	97	99	2.0	70 - 130	30	
Bromochloromethane	ND	98	97	1.0	99	94	5.2	70 - 130	30	
Bromodichloromethane	ND	120	122	1.7	123	119	3.3	70 - 130	30	
Bromoform	ND	107	109	1.9	110	108	1.8	70 - 130	30	
Bromomethane	ND	104	104	0.0	96	102	6.1	70 - 130	30	
Carbon Disulfide	ND	>150	>150	NC	103	103	0.0	70 - 130	30	I
Carbon tetrachloride	ND	109	109	0.0	110	111	0.9	70 - 130	30	
Chlorobenzene	ND	102	103	1.0	108	102	5.7	70 - 130	30	
Chloroethane	ND	92	89	3.3	94	95	1.1	70 - 130	30	
Chloroform	ND	99	99	0.0	99	95	4.1	70 - 130	30	
Chloromethane	ND	107	104	2.8	102	105	2.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	99	98	1.0	96	94	2.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	91	90	1.1	70 - 130	30	
Dibromochloromethane	ND	112	114	1.8	109	107	1.9	70 - 130	30	
Dibromoethane	ND	96	95	1.0	92	91	1.1	70 - 130	30	
Dibromomethane	ND	106	107	0.9	106	104	1.9	70 - 130	30	
Dichlorodifluoromethane	ND	103	101	2.0	104	108	3.8	70 - 130	30	
Ethylbenzene	ND	101	104	2.9	106	100	5.8	70 - 130	30	
Hexachlorobutadiene	ND	94	99	5.2	93	101	8.2	70 - 130	30	
Isopropylbenzene	ND	110	109	0.9	111	114	2.7	70 - 130	30	
m&p-Xylene	ND	102	101	1.0	104	101	2.9	70 - 130	30	
Methyl ethyl ketone	ND	83	83	0.0	90	87	3.4	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	80	81	1.2	72	71	1.4	70 - 130	30	
Methylene chloride	ND	87	86	1.2	87	83	4.7	70 - 130	30	
Naphthalene	ND	90	93	3.3	72	84	15.4	70 - 130	30	
n-Butylbenzene	ND	108	107	0.9	109	109	0.0	70 - 130	30	
n-Propylbenzene	ND	98	100	2.0	104	109	4.7	70 - 130	30	
o-Xylene	ND	102	101	1.0	103	100	3.0	70 - 130	30	
p-Isopropyltoluene	ND	114	116	1.7	111	112	0.9	70 - 130	30	
sec-Butylbenzene	ND	102	104	1.9	108	109	0.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Styrene	ND	94	90	4.3	97	93	4.2	70 - 130	30	
tert-Butylbenzene	ND	104	106	1.9	106	109	2.8	70 - 130	30	
Tetrachloroethene	ND	105	110	4.7	107	108	0.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	84	84	0.0	83	79	4.9	70 - 130	30	
Toluene	ND	101	101	0.0	97	95	2.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	97	99	2.0	100	98	2.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	96	0.0	90	88	2.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	85	84	1.2	77	74	4.0	70 - 130	30	
Trichloroethene	ND	102	100	2.0	102	101	1.0	70 - 130	30	
Trichlorofluoromethane	ND	117	118	0.9	105	106	0.9	70 - 130	30	
Trichlorotrifluoroethane	ND	99	100	1.0	99	101	2.0	70 - 130	30	
Vinyl chloride	ND	98	96	2.1	96	99	3.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	95	101	101	0.0	100	102	2.0	70 - 130	30	
% Bromofluorobenzene	88	103	103	0.0	100	101	1.0	70 - 130	30	
% Dibromofluoromethane	95	100	102	2.0	101	100	1.0	70 - 130	30	
% Toluene-d8	97	98	98	0.0	96	97	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198044, QC Sample No: BB62650 (BB62582, BB62583, BB62584, BB62585)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	120	119	0.8	126	128	1.6	70 - 130	30	
1,1,1-Trichloroethane	ND	96	97	1.0	109	110	0.9	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	101	105	3.9	107	112	4.6	70 - 130	30	
1,1,2-Trichloroethane	ND	89	91	2.2	92	98	6.3	70 - 130	30	
1,1-Dichloroethane	ND	92	93	1.1	101	102	1.0	70 - 130	30	
1,1-Dichloroethene	ND	86	88	2.3	103	108	4.7	70 - 130	30	
1,1-Dichloropropene	ND	93	94	1.1	102	107	4.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	83	90	8.1	79	92	15.2	70 - 130	30	
1,2,3-Trichloropropane	ND	94	98	4.2	99	104	4.9	70 - 130	30	
1,2,4-Trichlorobenzene	ND	88	92	4.4	87	97	10.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	105	1.0	110	111	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	90	95	5.4	82	94	13.6	70 - 130	30	
1,2-Dichlorobenzene	ND	95	96	1.0	100	106	5.8	70 - 130	30	
1,2-Dichloroethane	ND	92	93	1.1	101	103	2.0	70 - 130	30	
1,2-Dichloropropane	ND	93	92	1.1	95	97	2.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	104	105	1.0	109	111	1.8	70 - 130	30	
1,3-Dichlorobenzene	ND	95	97	2.1	103	105	1.9	70 - 130	30	
1,3-Dichloropropane	ND	96	96	0.0	94	102	8.2	70 - 130	30	
1,4-Dichlorobenzene	ND	92	93	1.1	100	102	2.0	70 - 130	30	
2,2-Dichloropropane	ND	119	117	1.7	97	98	1.0	70 - 130	30	
2-Chlorotoluene	ND	98	101	3.0	103	107	3.8	70 - 130	30	
2-Hexanone	ND	89	89	0.0	92	100	8.3	70 - 130	30	
2-Isopropyltoluene	ND	100	101	1.0	110	114	3.6	70 - 130	30	
4-Chlorotoluene	ND	98	99	1.0	108	110	1.8	70 - 130	30	
4-Methyl-2-pentanone	ND	83	84	1.2	89	96	7.6	70 - 130	30	
Acetone	ND	89	89	0.0	101	102	1.0	70 - 130	30	
Acrylonitrile	ND	90	96	6.5	102	106	3.8	70 - 130	30	
Benzene	ND	92	93	1.1	100	102	2.0	70 - 130	30	
Bromobenzene	ND	93	93	0.0	95	100	5.1	70 - 130	30	
Bromochloromethane	ND	94	97	3.1	102	104	1.9	70 - 130	30	
Bromodichloromethane	ND	106	105	0.9	105	107	1.9	70 - 130	30	
Bromoform	ND	124	117	5.8	137	132	3.7	70 - 130	30	m

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bromomethane	ND	99	100	1.0	89	101	12.6	70 - 130	30
Carbon Disulfide	ND	139	139	0.0	108	113	4.5	70 - 130	30
Carbon tetrachloride	ND	100	101	1.0	113	114	0.9	70 - 130	30
Chlorobenzene	ND	101	102	1.0	112	112	0.0	70 - 130	30
Chloroethane	ND	88	84	4.7	99	103	4.0	70 - 130	30
Chloroform	ND	95	95	0.0	104	102	1.9	70 - 130	30
Chloromethane	ND	101	102	1.0	103	114	10.1	70 - 130	30
cis-1,2-Dichloroethene	ND	93	92	1.1	100	102	2.0	70 - 130	30
cis-1,3-Dichloropropene	ND	103	103	0.0	95	103	8.1	70 - 130	30
Dibromochloromethane	ND	110	111	0.9	106	116	9.0	70 - 130	30
Dibromoethane	ND	90	95	5.4	98	102	4.0	70 - 130	30
Dibromomethane	ND	95	96	1.0	100	103	3.0	70 - 130	30
Dichlorodifluoromethane	ND	91	92	1.1	112	117	4.4	70 - 130	30
Ethylbenzene	ND	103	104	1.0	116	115	0.9	70 - 130	30
Hexachlorobutadiene	ND	84	88	4.7	92	100	8.3	70 - 130	30
Isopropylbenzene	ND	102	104	1.9	109	112	2.7	70 - 130	30
m&p-Xylene	ND	102	101	1.0	111	111	0.0	70 - 130	30
Methyl ethyl ketone	ND	81	91	11.6	91	93	2.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	100	101	1.0	99	103	4.0	70 - 130	30
Methylene chloride	ND	82	84	2.4	88	91	3.4	70 - 130	30
Naphthalene	ND	81	91	11.6	72	92	24.4	70 - 130	30
n-Butylbenzene	ND	103	104	1.0	107	111	3.7	70 - 130	30
n-Propylbenzene	ND	94	95	1.1	104	107	2.8	70 - 130	30
o-Xylene	ND	103	100	3.0	110	108	1.8	70 - 130	30
p-Isopropyltoluene	ND	107	109	1.9	109	114	4.5	70 - 130	30
sec-Butylbenzene	ND	100	100	0.0	109	113	3.6	70 - 130	30
Styrene	ND	99	94	5.2	116	108	7.1	70 - 130	30
tert-Butylbenzene	ND	98	99	1.0	103	109	5.7	70 - 130	30
Tetrachloroethene	ND	99	98	1.0	99	108	8.7	70 - 130	30
Tetrahydrofuran (THF)	ND	83	83	0.0	91	96	5.3	70 - 130	30
Toluene	ND	94	95	1.1	101	102	1.0	70 - 130	30
trans-1,2-Dichloroethene	ND	92	92	0.0	102	105	2.9	70 - 130	30
trans-1,3-Dichloropropene	ND	112	112	0.0	102	111	8.5	70 - 130	30
trans-1,4-dichloro-2-butene	ND	128	130	1.6	115	119	3.4	70 - 130	30
Trichloroethene	ND	96	96	0.0	103	108	4.7	70 - 130	30
Trichlorofluoromethane	ND	102	105	2.9	106	107	0.9	70 - 130	30
Trichlorotrifluoroethane	ND	86	87	1.2	101	105	3.9	70 - 130	30
Vinyl chloride	ND	88	90	2.2	96	107	10.8	70 - 130	30
% 1,2-dichlorobenzene-d4	100	101	101	0.0	100	100	0.0	70 - 130	30
% Bromofluorobenzene	92	100	98	2.0	98	99	1.0	70 - 130	30
% Dibromofluoromethane	100	99	101	2.0	104	103	1.0	70 - 130	30
% Toluene-d8	98	96	96	0.0	97	96	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 197934, QC Sample No: BB62844 (BB62580, BB62581)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	130	117	10.5	114	113	0.9	70 - 130	30
1,1,1-Trichloroethane	ND	114	103	10.1	103	99	4.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	108	100	7.7	102	101	1.0	70 - 130	30
1,1,2-Trichloroethane	ND	97	96	1.0	95	95	0.0	70 - 130	30
1,1-Dichloroethane	ND	106	97	8.9	97	95	2.1	70 - 130	30
1,1-Dichloroethene	ND	106	92	14.1	98	99	1.0	70 - 130	30

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	112	102	9.3	101	101	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	82	86	4.8	78	84	7.4	70 - 130	30	
1,2,3-Trichloropropane	ND	99	87	12.9	90	92	2.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	92	87	5.6	84	87	3.5	70 - 130	30	
1,2,4-Trimethylbenzene	ND	113	102	10.2	99	100	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	90	86	4.5	77	84	8.7	70 - 130	30	
1,2-Dichlorobenzene	ND	99	92	7.3	94	94	0.0	70 - 130	30	
1,2-Dichloroethane	ND	102	96	6.1	103	99	4.0	70 - 130	30	
1,2-Dichloropropane	ND	99	97	2.0	116	111	4.4	70 - 130	30	
1,3,5-Trimethylbenzene	ND	113	103	9.3	99	96	3.1	70 - 130	30	
1,3-Dichlorobenzene	ND	101	96	5.1	95	96	1.0	70 - 130	30	
1,3-Dichloropropane	ND	97	95	2.1	99	98	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	96	88	8.7	89	89	0.0	70 - 130	30	
2,2-Dichloropropane	ND	112	83	29.7	82	79	3.7	70 - 130	30	
2-Chlorotoluene	ND	108	100	7.7	98	96	2.1	70 - 130	30	
2-Hexanone	ND	95	85	11.1	90	89	1.1	70 - 130	30	
2-Isopropyltoluene	ND	106	98	7.8	98	98	0.0	70 - 130	30	
4-Chlorotoluene	ND	107	98	8.8	98	96	2.1	70 - 130	30	
4-Methyl-2-pentanone	ND	86	88	2.3	90	90	0.0	70 - 130	30	
Acetone	ND	115	111	3.5	100	109	8.6	70 - 130	30	
Acrylonitrile	ND	99	98	1.0	102	98	4.0	70 - 130	30	
Benzene	ND	108	98	9.7	97	96	1.0	70 - 130	30	
Bromobenzene	ND	98	93	5.2	93	92	1.1	70 - 130	30	
Bromochloromethane	ND	104	96	8.0	101	99	2.0	70 - 130	30	
Bromodichloromethane	ND	107	105	1.9	127	124	2.4	70 - 130	30	
Bromoform	ND	131	95	31.9	115	107	7.2	70 - 130	30	l,r
Bromomethane	ND	112	93	18.5	96	99	3.1	70 - 130	30	
Carbon Disulfide	ND	>150	135	NC	101	99	2.0	70 - 130	30	l
Carbon tetrachloride	ND	122	108	12.2	108	104	3.8	70 - 130	30	
Chlorobenzene	ND	113	102	10.2	103	101	2.0	70 - 130	30	
Chloroethane	ND	106	87	19.7	94	93	1.1	70 - 130	30	
Chloroform	ND	109	99	9.6	100	96	4.1	70 - 130	30	
Chloromethane	ND	108	90	18.2	103	102	1.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	107	95	11.9	97	96	1.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	102	96	6.1	99	97	2.0	70 - 130	30	
Dibromochloromethane	ND	104	103	1.0	113	111	1.8	70 - 130	30	
Dibromoethane	ND	100	97	3.0	100	99	1.0	70 - 130	30	
Dibromomethane	ND	103	98	5.0	114	110	3.6	70 - 130	30	
Dichlorodifluoromethane	ND	113	76	39.2	96	98	2.1	70 - 130	30	r
Ethylbenzene	ND	121	106	13.2	102	99	3.0	70 - 130	30	
Hexachlorobutadiene	ND	90	86	4.5	87	87	0.0	70 - 130	30	
Isopropylbenzene	ND	116	106	9.0	103	100	3.0	70 - 130	30	
m&p-Xylene	ND	114	99	14.1	102	99	3.0	70 - 130	30	
Methyl ethyl ketone	ND	93	92	1.1	93	95	2.1	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	94	88	6.6	82	81	1.2	70 - 130	30	
Methylene chloride	ND	93	83	11.4	90	86	4.5	70 - 130	30	
Naphthalene	ND	81	87	7.1	70	84	18.2	70 - 130	30	
n-Butylbenzene	ND	113	103	9.3	99	100	1.0	70 - 130	30	
n-Propylbenzene	ND	106	94	12.0	97	95	2.1	70 - 130	30	
o-Xylene	ND	115	96	18.0	102	97	5.0	70 - 130	30	
p-Isopropyltoluene	ND	118	109	7.9	103	103	0.0	70 - 130	30	
sec-Butylbenzene	ND	111	100	10.4	99	98	1.0	70 - 130	30	
Styrene	ND	115	87	27.7	95	90	5.4	70 - 130	30	

QA/QC Data

SDG I.D.: GBB62580

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
tert-Butylbenzene	ND	108	100	7.7	98	97	1.0	70 - 130	30
Tetrachloroethene	ND	107	99	7.8	103	101	2.0	70 - 130	30
Tetrahydrofuran (THF)	ND	88	88	0.0	91	90	1.1	70 - 130	30
Toluene	ND	107	99	7.8	99	97	2.0	70 - 130	30
trans-1,2-Dichloroethene	ND	109	97	11.7	98	97	1.0	70 - 130	30
trans-1,3-Dichloropropene	ND	105	100	4.9	102	100	2.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	107	95	11.9	90	85	5.7	70 - 130	30
Trichloroethene	ND	111	102	8.5	101	100	1.0	70 - 130	30
Trichlorofluoromethane	ND	127	110	14.3	101	100	1.0	70 - 130	30
Trichlorotrifluoroethane	ND	108	95	12.8	91	97	6.4	70 - 130	30
Vinyl chloride	ND	102	86	17.0	95	95	0.0	70 - 130	30
% 1,2-dichlorobenzene-d4	97	99	100	1.0	101	101	0.0	70 - 130	30
% Bromofluorobenzene	93	99	102	3.0	105	102	2.9	70 - 130	30
% Dibromofluoromethane	95	100	99	1.0	99	101	2.0	70 - 130	30
% Toluene-d8	99	97	98	1.0	98	99	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 16, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB62580

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB62580	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62580	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62580	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62580	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62580	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62580	MAGU-NH	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.09	0.040	0.06	0.06	ug/L
BB62580	MAGU-NH	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.014	0.004	0.01	0.01	mg/L
BB62580	MAGU-NH	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.014	0.004	0.004	0.004	mg/L
BB62581	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62581	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62581	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62581	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62581	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62582	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5	0.5	0.5	ug/L
BB62582	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62582	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62582	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62582	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62583	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62583	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62583	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62583	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62583	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62583	MAGU-NH	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.003	0.002	0.002	ug/L
BB62584	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62584	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62584	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62584	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62584	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62584	MAGU-NH	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.005	0.002	0.002	ug/L
BB62585	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62585	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB62585	MAGU-NH	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB62585	MAGU-NH	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB62585	MAGU-NH	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB62585	MAGU-NH	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.08	0.050	0.077	0.077	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB62580

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB62585	MAGU-NH	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.004	0.002	0.002	ug/L
BB62586	MAGU-NH	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB62586	MAGU-NH	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-NH

Project Location: METRO NORTH CANTENARY P **Project Number:**

Laboratory Sample ID(s): BB62580, BB62581, BB62582, BB62583, BB62584, BB62585, BB62586

Sampling Date(s): 4/4/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Monday, April 16, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Pyridine was analyzed only by full scan and the reporting level does not meet GWP criteria.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWP criteria.

Not all constituents met requested criteria due to matrix or the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid84 04/09/12-2 (BB62580, BB62581)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/9/2012

Instrument: Au-xl1 04/10/12-1 (BB62582, BB62583, BB62584, BB62585)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C30, C36

Printed Name Jeff Bucko
Position: Chemist
Date: 4/10/2012

QC Comments: QC Batch 97777 04/05/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

QC (Batch Specific)

---------- Sample No: BB61059, QA/QC Batch: 197777 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 04/07/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

Initial Calibration ECD14-040712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/7/2012

QC Comments: QC Batch 97833 04/06/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB62580, QA/QC Batch: 197833 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4,5-T(22.0%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/06/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/6/2012

QC (Batch Specific)

---------- Sample No: BB62834, QA/QC Batch: 197805 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 04/06/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/6/2012

Instrument: Icp9 04/08/12-1 (BB62582)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/8/2012

Instrument: Icp9 04/10/12-1 (BB62582)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Phyllis Shiller
Position: Chemist
Date: 4/10/2012

QC (Site Specific)

---------- Sample No: BB62580, QA/QC Batch: 197764 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB62487, QA/QC Batch: 197783 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB62655, QA/QC Batch: 197794 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 04/10/12-1 (BB62580, BB62581, BB62582)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/10/2012

Instrument: Au-ecd7 04/11/12-1 (BB62583, BB62584, BB62585)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Adam Werner
Position: Chemist
Date: 4/11/2012

QC Comments: QC Batch 97713 04/04/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB62185, QA/QC Batch: 197713 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/10/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

Printed Name Mark Rochette
Position: Chemist
Date: 4/10/2012

QC Comments: QC Batch 97709 04/04/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB61708, QA/QC Batch: 197709 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197774 (Samples: (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

Instrument: Chem12 04/07/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0405):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Aniline, Benzoic Acid, 4-chloroaniline, 2,4-dinitrophenol, Pentachlorophenol, Carbazole, 3,3'-dichlorobenzidine

The following compounds failed to meet the minimum required response factor: 2-nitrophenol

Continuing Calibration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, 4-Chloroaniline, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 4/7/2012

QC Comments: QC Batch 97774 04/05/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB62580, QA/QC Batch: 197774 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(>150%), Carbazole(>150%), Hexachlorocyclopentadiene(25%), Pyridine(13%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(>150%), Carbazole(>150%), Hexachlorocyclopentadiene(22%), Pentachlorophenol(23%), Pyridine(<5%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4-Dinitrophenol(59.6%), 4-Nitrophenol(22.6%), Pentachlorophenol(77.3%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 04/07/12-1 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0407):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Pentachlorophenol

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

Printed Name Damien Drobinski
Position: Chemist
Date: 4/7/2012

QC Comments: QC Batch 97774 04/05/12 (BB62580, BB62581, BB62582, BB62583, BB62584, BB62585)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197941 (Samples: (BB62586): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

QC Batch 198044 (Samples: (BB62582, BB62583, BB62584, BB62585): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

QC Batch 197934 (Samples: (BB62580, BB62581): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

Instrument: Chem08 04/06/12-1 (BB62580, BB62581)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: None.

Printed Name Tina Covensky
Position: Chemist
Date: 4/6/2012

Instrument: Chem08 04/06/12-2 (BB62586)

S -Side

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: None.

Printed Name Tina Covensky
Position: Chemist
Date: 4/6/2012

Instrument: Chem08 04/09/12-1 (BB62582, BB62583, BB62584, BB62585)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Naphthalene

Printed Name Tina Covensky
Position: Chemist
Date: 4/9/2012

QC Comments: QC Batch 97934 04/09/12 (BB62580, BB62581)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 97941 04/09/12 (BB62586)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98044 04/10/12 (BB62582, BB62583, BB62584, BB62585)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 16, 2012

SDG I.D.: GBB62580

QC (Site Specific)

---------- Sample No: BB62586, QA/QC Batch: 197941 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(>150%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB62650, QA/QC Batch: 198044 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(139%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(139%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB62844, QA/QC Batch: 197934 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromoform(131%), Carbon Disulfide(>150%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(135%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromoform(31.9%), Dichlorodifluoromethane(39.2%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Highway
Rocky Hill CT 06067

Project: MetroNorth Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project ~~P.O.~~: 301-145 + 301-40
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: Cindy Lyt Date: 4-4-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081A/8082	Herbicides 8151	Total RCRA 3 Metals	Dissolved RCRA 8 Metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 1500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
62580	GP-9 GW	GW	4-4-12	7:50am	X	X	X	X	X	X	X						3	6			2
62581	GP-13 GW	↓	↓	8:49am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
62582	GP-15 GW	↓	↓	9:55am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
62583	GP-16 GW	↓	↓	11:24am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
62584	GP-18 GW	↓	↓	1:11pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
62585	GP-19 GW	↓	↓	2:47pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
62586	TB-1	O	↓	-	↓												2				

Relinquished by:	Accepted by:	Date:	Time:
Cindy Lyt	[signature]	4/5/12	9:50
[signature]	Paradise	4/5/12	1435

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☒ Other General Permit Disch. Limits

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Wednesday, April 25, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD
Sample ID#s: BB72506 - BB72512

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	6:21
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72506

Project ID: METRO NORTH RAILROAD

Client ID: GP-32 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	0.005	0.004	mg/L	04/18/12		LK	6010
Barium	0.675	0.002	mg/L	04/18/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Chromium	0.009	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/17/12		EK	6010
Barium (Dissolved)	0.165	0.002	mg/L	04/17/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	0.045	0.002	mg/L	04/18/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	12	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	84		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	91		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/20/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/20/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	129		%	04/20/12		MH	30 - 150 %
% TCMX	112		%	04/20/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: GP-32 GW

Phoenix I.D.: BB72506

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	89		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	77		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/19/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/19/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/19/12		R/T	SW8260
Acetone	ND	25	ug/L	04/19/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/19/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/19/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/19/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/19/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD
Client ID: GP-32 GW

Phoenix I.D.: BB72506

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/19/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/19/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/19/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/19/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/19/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/19/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/19/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/19/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/19/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/19/12		R/T	70 - 130 %
% Bromofluorobenzene	93		%	04/19/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	04/19/12		R/T	70 - 130 %
% Toluene-d8	100		%	04/19/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: GP-32 GW

Phoenix I.D.: BB72506

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	75		%	04/18/12		DD	15 - 130 %
% Phenol-d5	69		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.06	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: GP-32 GW

Phoenix I.D.: BB72506

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	0.07	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	75		%	04/17/12		DD	15 - 130 %
% Phenol-d5	69		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	7:32
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72507

Project ID: METRO NORTH RAILROAD

Client ID: GP-34 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
Barium	< 0.002	0.002	mg/L	04/18/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Chromium	0.001	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/17/12		EK	6010
Barium (Dissolved)	< 0.002	0.002	mg/L	04/18/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Chromium (Dissolved)	0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/18/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/18/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	77		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	91		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/17/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	73		%	04/17/12		MH	30 - 150 %
% TCMX	63		%	04/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: GP-34 GW

Phoenix I.D.: BB72507

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	83		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	79		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/19/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/19/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/19/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/19/12		R/T	SW8260
Acetone	ND	25	ug/L	04/19/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/19/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/19/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/19/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/19/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/19/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/19/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD
Client ID: GP-34 GW

Phoenix I.D.: BB72507

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/19/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/19/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/19/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/19/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/19/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/19/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/19/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/19/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/19/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/19/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/19/12		R/T	70 - 130 %
% Bromofluorobenzene	91		%	04/19/12		R/T	70 - 130 %
% Dibromofluoromethane	100		%	04/19/12		R/T	70 - 130 %
% Toluene-d8	101		%	04/19/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: GP-34 GW

Phoenix I.D.: BB72507

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/18/12		DD	15 - 130 %
% Phenol-d5	70		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: GP-34 GW

Phoenix I.D.: BB72507

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/17/12		DD	15 - 130 %
% Phenol-d5	70		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	97		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	8:49
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72508

Project ID: METRO NORTH RAILROAD

Client ID: GP-53 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	0.007	0.004	mg/L	04/18/12		LK	6010
Barium	0.038	0.002	mg/L	04/18/12		LK	6010
Cadmium	0.008	0.001	mg/L	04/18/12		LK	6010
Chromium	0.001	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	0.006	0.004	mg/L	04/18/12		LK	6010
Barium (Dissolved)	0.034	0.002	mg/L	04/18/12		LK	6010
Cadmium (Dissolved)	0.006	0.001	mg/L	04/18/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/18/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	80		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	123		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/17/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	91		%	04/17/12		MH	30 - 150 %
% TCMX	74		%	04/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: GP-53 GW

Phoenix I.D.: BB72508

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	96		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	91		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/20/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/20/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/20/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/20/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/20/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/20/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/20/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/20/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/20/12		R/T	SW8260
Acetone	ND	25	ug/L	04/20/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/20/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/20/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/20/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/20/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/20/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/20/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/20/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
cis-1,2-Dichloroethene	3.4	1.0	ug/L	04/20/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/20/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/20/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/20/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/20/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/20/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/20/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/20/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/20/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/20/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/20/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/20/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Tetrachloroethene	7.9	1.0	ug/L	04/20/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/20/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/20/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/20/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/20/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/20/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/20/12		R/T	SW8260
Trichloroethene	10	1.0	ug/L	04/20/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/20/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/20/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/20/12		R/T	70 - 130 %
% Bromofluorobenzene	92		%	04/20/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	04/20/12		R/T	70 - 130 %
% Toluene-d8	102		%	04/20/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: GP-53 GW

Phoenix I.D.: BB72508

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	107		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/18/12		DD	15 - 130 %
% Phenol-d5	68		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	102		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: GP-53 GW

Phoenix I.D.: BB72508

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	107		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/17/12		DD	15 - 130 %
% Phenol-d5	68		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	102		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	10:31
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72509

Project ID: METRO NORTH RAILROAD

Client ID: GP-54 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
Barium	0.061	0.002	mg/L	04/18/12		LK	6010
Cadmium	0.002	0.001	mg/L	04/18/12		LK	6010
Chromium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	0.006	0.004	mg/L	04/18/12		LK	6010
Barium (Dissolved)	0.034	0.002	mg/L	04/18/12		LK	6010
Cadmium (Dissolved)	0.005	0.001	mg/L	04/18/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/19/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	12	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	83		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	86		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/17/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	81		%	04/17/12		MH	30 - 150 %
% TCMX	70		%	04/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: GP-54 GW

Phoenix I.D.: BB72509

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	86		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1	ug/L	04/19/12		R/T	SW8260
1,1,1-Trichloroethane	2.1	2.0	ug/L	04/19/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,2-Trichloroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethane	12	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethene	2.4	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloropropene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichloroethane	ND	1	ug/L	04/19/12		R/T	SW8260
1,2-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,4-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
2,2-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
2-Chlorotoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
2-Hexanone	ND	10	ug/L	04/19/12		R/T	SW8260
2-Isopropyltoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
4-Chlorotoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
4-Methyl-2-pentanone	ND	10	ug/L	04/19/12		R/T	SW8260
Acetone	ND	50	ug/L	04/19/12		R/T	SW8260
Acrylonitrile	ND	10	ug/L	04/19/12		R/T	SW8260
Benzene	ND	1	ug/L	04/19/12		R/T	SW8260
Bromobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromochloromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromodichloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromoform	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromomethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Carbon Disulfide	ND	10	ug/L	04/19/12		R/T	SW8260
Carbon tetrachloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloroform	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
cis-1,2-Dichloroethene	91	20.0	ug/L	04/19/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromochloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromoethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Dibromomethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Dichlorodifluoromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Hexachlorobutadiene	ND	0.80	ug/L	04/19/12		R/T	SW8260
Isopropylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
m&p-Xylene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Methyl ethyl ketone	ND	10	ug/L	04/19/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	04/19/12		R/T	SW8260
Methylene chloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
Naphthalene	ND	2.0	ug/L	04/19/12		R/T	SW8260
n-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
n-Propylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
o-Xylene	ND	2.0	ug/L	04/19/12		R/T	SW8260
p-Isopropyltoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
sec-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Styrene	ND	2.0	ug/L	04/19/12		R/T	SW8260
tert-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Tetrachloroethene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	10	ug/L	04/19/12		R/T	SW8260
Toluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Total Xylenes	ND	2.0	ug/L	04/19/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	2.0	ug/L	04/19/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/L	04/19/12		R/T	SW8260
Trichloroethene	260	20.0	ug/L	04/19/12		R/T	SW8260
Trichlorofluoromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Trichlorotrifluoroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Vinyl chloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/19/12		R/T	70 - 130 %
% Bromofluorobenzene	92		%	04/19/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	04/19/12		R/T	70 - 130 %
% Toluene-d8	102		%	04/19/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: GP-54 GW

Phoenix I.D.: BB72509

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/18/12		DD	15 - 130 %
% Phenol-d5	60		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: GP-54 GW

Phoenix I.D.: BB72509

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	105		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	66		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/17/12		DD	15 - 130 %
% Phenol-d5	60		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	12:47
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72510

Project ID: METRO NORTH RAILROAD

Client ID: GP-55 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
Barium	0.059	0.002	mg/L	04/18/12		LK	6010
Cadmium	0.002	0.001	mg/L	04/18/12		LK	6010
Chromium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	0.007	0.004	mg/L	04/18/12		LK	6010
Barium (Dissolved)	0.033	0.002	mg/L	04/18/12		LK	6010
Cadmium (Dissolved)	0.007	0.001	mg/L	04/18/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/19/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	37		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	89		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/17/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	74		%	04/17/12		MH	30 - 150 %
% TCMX	61		%	04/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: GP-55 GW

Phoenix I.D.: BB72510

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	108		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	84		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,1,1-Trichloroethane	2.3	2.0	ug/L	04/19/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
1,1,2-Trichloroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethane	13	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloroethene	2.5	2.0	ug/L	04/19/12		R/T	SW8260
1,1-Dichloropropene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,3-Trichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,2-Dichloroethane	ND	1	ug/L	04/19/12		R/T	SW8260
1,2-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,3-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
1,4-Dichlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
2,2-Dichloropropane	ND	2.0	ug/L	04/19/12		R/T	SW8260
2-Chlorotoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
2-Hexanone	ND	10	ug/L	04/19/12		R/T	SW8260
2-Isopropyltoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
4-Chlorotoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
4-Methyl-2-pentanone	ND	10	ug/L	04/19/12		R/T	SW8260
Acetone	ND	50	ug/L	04/19/12		R/T	SW8260
Acrylonitrile	ND	10	ug/L	04/19/12		R/T	SW8260
Benzene	ND	1	ug/L	04/19/12		R/T	SW8260
Bromobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromochloromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromodichloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Bromoform	ND	2.0	ug/L	04/19/12		R/T	SW8260
Bromomethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Carbon Disulfide	ND	10	ug/L	04/19/12		R/T	SW8260
Carbon tetrachloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chlorobenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloroform	ND	2.0	ug/L	04/19/12		R/T	SW8260
Chloromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
cis-1,2-Dichloroethene	96	20.0	ug/L	04/19/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromochloromethane	ND	1.0	ug/L	04/19/12		R/T	SW8260
Dibromoethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Dibromomethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Dichlorodifluoromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Hexachlorobutadiene	ND	0.80	ug/L	04/19/12		R/T	SW8260
Isopropylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
m&p-Xylene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Methyl ethyl ketone	ND	10	ug/L	04/19/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	04/19/12		R/T	SW8260
Methylene chloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
Naphthalene	ND	2.0	ug/L	04/19/12		R/T	SW8260
n-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
n-Propylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
o-Xylene	ND	2.0	ug/L	04/19/12		R/T	SW8260
p-Isopropyltoluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
sec-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Styrene	ND	2.0	ug/L	04/19/12		R/T	SW8260
tert-Butylbenzene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Tetrachloroethene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	10	ug/L	04/19/12		R/T	SW8260
Toluene	ND	2.0	ug/L	04/19/12		R/T	SW8260
Total Xylenes	ND	2.0	ug/L	04/19/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	2.0	ug/L	04/19/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	1.0	ug/L	04/19/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/L	04/19/12		R/T	SW8260
Trichloroethene	280	20.0	ug/L	04/19/12		R/T	SW8260
Trichlorofluoromethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Trichlorotrifluoroethane	ND	2.0	ug/L	04/19/12		R/T	SW8260
Vinyl chloride	ND	2.0	ug/L	04/19/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/19/12		R/T	70 - 130 %
% Bromofluorobenzene	94		%	04/19/12		R/T	70 - 130 %
% Dibromofluoromethane	101		%	04/19/12		R/T	70 - 130 %
% Toluene-d8	104		%	04/19/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: GP-55 GW

Phoenix I.D.: BB72510

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	72	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	52		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	69		%	04/18/12		DD	15 - 130 %
% Phenol-d5	53		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	114		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: GP-55 GW

Phoenix I.D.: BB72510

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	52		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	69		%	04/17/12		DD	15 - 130 %
% Phenol-d5	53		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	114		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72511

Project ID: METRO NORTH RAILROAD

Client ID: TB-4

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/18/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/18/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/18/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/18/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/18/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/18/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/18/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/18/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/18/12		R/T	SW8260
Acetone	ND	25	ug/L	04/18/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD
Client ID: TB-4

Phoenix I.D.: BB72511

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	04/18/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/18/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/18/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/18/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/18/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/18/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/18/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/18/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/18/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/18/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/18/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/18/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/18/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/18/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/18/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/18/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/18/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/18/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/18/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/18/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/18/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/18/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/18/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/18/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/18/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/18/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/18/12		R/T	70 - 130 %
% Bromofluorobenzene	89		%	04/18/12		R/T	70 - 130 %
% Dibromofluoromethane	95		%	04/18/12		R/T	70 - 130 %
% Toluene-d8	98		%	04/18/12		R/T	70 - 130 %

Project ID: METRO NORTH RAILROAD
Client ID: TB-4

Phoenix I.D.: BB72511

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/13/12	14:19
Location Code:	MAGU-DAS	Received by:	LB	04/16/12	15:47
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB72506
Phoenix ID: BB72512

Project ID: METRO NORTH RAILROAD

Client ID: FB-1

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/18/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
Barium	< 0.002	0.002	mg/L	04/18/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Chromium	< 0.001	0.001	mg/L	04/18/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/17/12		EK	6010
Barium (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/17/12		EK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/17/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/17/12		EK	6010
Mercury	< 0.0002	0.0002	mg/L	04/17/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/19/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/18/12		LK	6010
Dissolved Metals Preparation	Completed			04/16/12		AG	SW846-3005
Total Metals Digestion	Completed			04/16/12		AG	
Extraction of CT ETPH	Completed			04/17/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/17/12		X/X	SW7470
Mercury Digestion	Completed			04/17/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/17/12		D/E/D	SW8151
PCB Extraction	Completed			04/16/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/16/12		T/L	SW3510
Semi-Volatile Extraction	Completed			04/16/12		F/E	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/18/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/18/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/18/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/18/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/18/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/18/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/18/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	126		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/17/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/17/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	74		%	04/17/12		MH	30 - 150 %
% TCMX	68		%	04/17/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/18/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/18/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/18/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/18/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/18/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/18/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/18/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/18/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/18/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/18/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/18/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/18/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/18/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/18/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD
Client ID: FB-1

Phoenix I.D.: BB72512

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/18/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	82		%	04/18/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	93		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/17/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/17/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/17/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/17/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/17/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/17/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/17/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/17/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/17/12		H/T	SW8260
Acetone	ND	25	ug/L	04/17/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/17/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/17/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/17/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/17/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/17/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/17/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/17/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/17/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/17/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/17/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/17/12		H/T	SW8260

Project ID: METRO NORTH RAILROAD
Client ID: FB-1

Phoenix I.D.: BB72512

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/17/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/17/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/17/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/17/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/17/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/17/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/17/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/17/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/17/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/17/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/17/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/17/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/17/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/17/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/17/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/17/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/17/12		H/T	70 - 130 %
% Bromofluorobenzene	89		%	04/17/12		H/T	70 - 130 %
% Dibromofluoromethane	80		%	04/17/12		H/T	70 - 130 %
% Toluene-d8	91		%	04/17/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/18/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/18/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/18/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/18/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/18/12		DD	SW8270

Project ID: METRO NORTH RAILROAD
Client ID: FB-1

Phoenix I.D.: BB72512

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/18/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/18/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/18/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/18/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/18/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/18/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/18/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/18/12		DD	SW8270
Aniline	ND	10	ug/L	04/18/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/18/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
Benzidine	ND	50	ug/L	04/18/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/18/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/18/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/18/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/18/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/18/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/18/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/18/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/18/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/18/12		DD	SW8270
Phenol	ND	10	ug/L	04/18/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/18/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/18/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	103		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	67		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/18/12		DD	15 - 130 %
% Phenol-d5	17		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/18/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD
Client ID: FB-1

Phoenix I.D.: BB72512

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	103		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	67		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	74		%	04/17/12		DD	15 - 130 %
% Phenol-d5	17		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/17/12		DD	15 - 130 %

Comments:

FIELD BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 25, 2012

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198476, QC Sample No: BB72354 (BB72506)													
ICP Metals - Dissolved													
Arsenic	BDL	<0.004	<0.004	NC	99.1	97.4	1.7	96.0	95.1	0.9	75 - 125	20	
Barium	BDL	0.021	0.021	0	101	99.6	1.4	98.4	97.4	1.0	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	98.6	98.1	0.5	96.7	96.6	0.1	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	101	98.9	2.1	96.8	95.9	0.9	75 - 125	20	
Lead	BDL	0.002	<0.002	NC	101	99.6	1.4	96.9	95.9	1.0	75 - 125	20	
Selenium	BDL	<0.011	<0.011	NC	95.8	94.6	1.3	93.4	92.5	1.0	75 - 125	20	
Silver	BDL	<0.001	<0.001	NC	97.7	96.4	1.3	49.8	39.8	22.3	75 - 125	20	m,r
QA/QC Batch 198494, QC Sample No: BB72366 (BB72506, BB72507)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	102	101	1.0	98.5	101	2.5	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 198495, QC Sample No: BB72508 (BB72508, BB72509, BB72510, BB72512)													
Mercury - Water	BDL	<0.0002	<0.0002	NC	105	101	3.9	102	102	0.0	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 198477, QC Sample No: BB72731 (BB72507, BB72508, BB72509, BB72510, BB72512)													
ICP Metals - Dissolved													
Arsenic	BDL	<0.004	<0.004	NC	97.4	96.7	0.7	97.7	97.9	0.2	75 - 125	20	
Barium	BDL	0.212	0.213	0.50	98.7	98.4	0.3	97.9	98.4	0.5	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	97.6	97.3	0.3	96.8	97.2	0.4	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	98.5	98.5	0.0	98.1	98.5	0.4	75 - 125	20	
Lead	BDL	<0.002	<0.002	NC	98.8	99.1	0.3	98.5	98.9	0.4	75 - 125	20	
Selenium	BDL	<0.011	<0.011	NC	95.2	94.7	0.5	95.5	95.4	0.1	75 - 125	20	
Silver	BDL	<0.001	<0.001	NC	95.6	95.6	0.0	96.1	96.6	0.5	75 - 125	20	
QA/QC Batch 198485, QC Sample No: BB72740 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)													
ICP Metals - Aqueous													
Arsenic	BDL	<0.004	<0.004	NC	97.1	98.2	1.1	95.5	97.3	1.9	75 - 125	20	
Barium	BDL	0.090	<0.002	NC	102	103	1.0	98.6	101	2.4	75 - 125	20	
Cadmium	BDL	<0.001	<0.001	NC	98.2	98.9	0.7	95.2	97.4	2.3	75 - 125	20	
Chromium	BDL	<0.001	<0.001	NC	102	103	1.0	99.0	101	2.0	75 - 125	20	
Lead	BDL	0.002	<0.002	NC	102	103	1.0	98.7	101	2.3	75 - 125	20	
Selenium	BDL	<0.010	<0.010	NC	96.0	97.1	1.1	94.2	96.1	2.0	75 - 125	20	
Silver	BDL	<0.002	<0.001	NC	98.4	99.3	0.9	95.9	97.9	2.1	75 - 125	20	

m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 25, 2012

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 198190, QC Sample No: BB70278 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)									
Chlorinated Herbicides - Ground Water									
2,4,5-T	ND	100	112	11.3				40 - 140	20
2,4,5-TP (Silvex)	ND	89	92	3.3				40 - 140	20
2,4-D	ND	102	115	12.0				40 - 140	20
2,4-DB	ND	95	105	10.0				40 - 140	20
Dalapon	ND	79	85	7.3				40 - 140	20
Dicamba	ND	83	101	19.6				40 - 140	20
Dichloroprop	ND	86	96	11.0				40 - 140	20
Dinoseb	ND	45	72	46.2				40 - 140	20
% DCAA (Surrogate Rec)	74	66	76	14.1				30 - 150	20
QA/QC Batch 198484, QC Sample No: BB71790 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)									
Pesticides - Ground Water									
4,4' -DDD	ND	110	93	16.7				40 - 140	20
4,4' -DDE	ND	85	77	9.9				40 - 140	20
4,4' -DDT	ND	93	94	1.1				40 - 140	20
a-BHC	ND	77	65	16.9				40 - 140	20
a-Chlordane	ND	70	67	4.4				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	70	71	1.4				40 - 140	20
b-BHC	ND	72	76	5.4				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	78	76	2.6				40 - 140	20
Dieldrin	ND	81	78	3.8				40 - 140	20
Endosulfan I	ND	76	75	1.3				40 - 140	20
Endosulfan II	ND	79	78	1.3				40 - 140	20
Endosulfan sulfate	ND	87	86	1.2				40 - 140	20
Endrin	ND	89	86	3.4				40 - 140	20
Endrin aldehyde	ND	89	85	4.6				40 - 140	20
Endrin ketone	ND	79	84	6.1				40 - 140	20
g-BHC	ND	77	75	2.6				40 - 140	20
g-Chlordane	ND	78	76	2.6				40 - 140	20
Heptachlor	ND	74	74	0.0				40 - 140	20
Heptachlor epoxide	ND	77	76	1.3				40 - 140	20
Methoxychlor	ND	115	116	0.9				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	85	90	90	0.0				30 - 150	20
% TCMX	71	73	70	4.2				30 - 150	20
QA/QC Batch 198621, QC Sample No: BB72463 (BB72512)									
Volatiles - Ground Water									
1,1,1,2-Tetrachloroethane	ND	93	108	14.9				70 - 130	30
1,1,1-Trichloroethane	ND	80	77	3.8				70 - 130	30

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,1,2,2-Tetrachloroethane	ND	100	90	10.5				70 - 130	30
1,1,2-Trichloroethane	ND	96	95	1.0				70 - 130	30
1,1-Dichloroethane	ND	86	85	1.2				70 - 130	30
1,1-Dichloroethene	ND	86	82	4.8				70 - 130	30
1,1-Dichloropropene	ND	99	99	0.0				70 - 130	30
1,2,3-Trichlorobenzene	ND	123	117	5.0				70 - 130	30
1,2,3-Trichloropropane	ND	103	97	6.0				70 - 130	30
1,2,4-Trichlorobenzene	ND	120	117	2.5				70 - 130	30
1,2,4-Trimethylbenzene	ND	113	109	3.6				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	94	80	16.1				70 - 130	30
1,2-Dichlorobenzene	ND	98	97	1.0				70 - 130	30
1,2-Dichloroethane	ND	94	88	6.6				70 - 130	30
1,2-Dichloropropane	ND	98	101	3.0				70 - 130	30
1,3,5-Trimethylbenzene	ND	117	110	6.2				70 - 130	30
1,3-Dichlorobenzene	ND	111	104	6.5				70 - 130	30
1,3-Dichloropropane	ND	96	93	3.2				70 - 130	30
1,4-Dichlorobenzene	ND	101	99	2.0				70 - 130	30
2,2-Dichloropropane	ND	71	68	4.3				70 - 130	30
2-Chlorotoluene	ND	105	98	6.9				70 - 130	30
2-Hexanone	ND	96	84	13.3				70 - 130	30
2-Isopropyltoluene	ND	107	103	3.8				70 - 130	30
4-Chlorotoluene	ND	101	99	2.0				70 - 130	30
4-Methyl-2-pentanone	ND	89	90	1.1				70 - 130	30
Acetone	ND	82	71	14.4				70 - 130	30
Acrylonitrile	ND	87	80	8.4				70 - 130	30
Benzene	ND	100	99	1.0				70 - 130	30
Bromobenzene	ND	98	95	3.1				70 - 130	30
Bromochloromethane	ND	81	86	6.0				70 - 130	30
Bromodichloromethane	ND	89	94	5.5				70 - 130	30
Bromoform	ND	126	101	22.0				70 - 130	30
Bromomethane	ND	70	74	5.6				70 - 130	30
Carbon Disulfide	ND	88	89	1.1				70 - 130	30
Carbon tetrachloride	ND	89	86	3.4				70 - 130	30
Chlorobenzene	ND	95	102	7.1				70 - 130	30
Chloroethane	ND	91	91	0.0				70 - 130	30
Chloroform	ND	87	83	4.7				70 - 130	30
Chloromethane	ND	82	81	1.2				70 - 130	30
cis-1,2-Dichloroethene	ND	88	87	1.1				70 - 130	30
cis-1,3-Dichloropropene	ND	94	97	3.1				70 - 130	30
Dibromochloromethane	ND	97	95	2.1				70 - 130	30
Dibromoethane	ND	97	100	3.0				70 - 130	30
Dibromomethane	ND	96	97	1.0				70 - 130	30
Dichlorodifluoromethane	ND	79	75	5.2				70 - 130	30
Ethylbenzene	ND	103	113	9.3				70 - 130	30
Hexachlorobutadiene	ND	98	95	3.1				70 - 130	30
Isopropylbenzene	ND	110	104	5.6				70 - 130	30
m&p-Xylene	ND	106	116	9.0				70 - 130	30
Methyl ethyl ketone	ND	78	72	8.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	92	86	6.7				70 - 130	30
Methylene chloride	ND	80	79	1.3				70 - 130	30
Naphthalene	ND	140	148	5.6				70 - 130	30
n-Butylbenzene	ND	111	109	1.8				70 - 130	30
n-Propylbenzene	ND	103	102	1.0				70 - 130	30

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
o-Xylene	ND	127	115	9.9				70 - 130	30
p-Isopropyltoluene	ND	113	110	2.7				70 - 130	30
sec-Butylbenzene	ND	109	104	4.7				70 - 130	30
Styrene	ND	140	119	16.2				70 - 130	30
tert-Butylbenzene	ND	105	100	4.9				70 - 130	30
Tetrachloroethene	ND	92	93	1.1				70 - 130	30
Tetrahydrofuran (THF)	ND	73	72	1.4				70 - 130	30
Toluene	ND	96	100	4.1				70 - 130	30
trans-1,2-Dichloroethene	ND	83	83	0.0				70 - 130	30
trans-1,3-Dichloropropene	ND	87	98	11.9				70 - 130	30
trans-1,4-dichloro-2-butene	ND	106	100	5.8				70 - 130	30
Trichloroethene	ND	98	96	2.1				70 - 130	30
Trichlorofluoromethane	ND	80	81	1.2				70 - 130	30
Trichlorotrifluoroethane	ND	82	78	5.0				70 - 130	30
Vinyl chloride	ND	81	80	1.2				70 - 130	30
% 1,2-dichlorobenzene-d4	100	99	94	5.2				70 - 130	30
% Bromofluorobenzene	90	98	93	5.2				70 - 130	30
% Dibromofluoromethane	80	81	85	4.8				70 - 130	30
% Toluene-d8	97	95	99	4.1				70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198483, QC Sample No: BB72503 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

Polychlorinated Biphenyls - Ground Water

PCB-1016	ND	87	80	8.4				40 - 140	20
PCB-1221	ND							40 - 140	20
PCB-1232	ND							40 - 140	20
PCB-1242	ND							40 - 140	20
PCB-1248	ND							40 - 140	20
PCB-1254	ND							40 - 140	20
PCB-1260	ND	87	81	7.1				40 - 140	20
PCB-1262	ND							40 - 140	20
PCB-1268	ND							40 - 140	20
% DCBP (Surrogate Rec)	98	100	97	3.0				30 - 150	20
% TCMX (Surrogate Rec)	92	90	89	1.1				30 - 150	20

QA/QC Batch 198458, QC Sample No: BB72506 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	56	53	5.5				30 - 130	20
1,2,4-Trichlorobenzene	ND	86	82	4.8				30 - 130	20
1,2-Dichlorobenzene	ND	87	86	1.2				30 - 130	20
1,3-Dichlorobenzene	ND	83	82	1.2				30 - 130	20
1,4-Dichlorobenzene	ND	85	85	0.0				30 - 130	20
2,4,5-Trichlorophenol	ND	97	89	8.6				30 - 130	20
2,4,6-Trichlorophenol	ND	100	96	4.1				30 - 130	20
2,4-Dichlorophenol	ND	99	94	5.2				30 - 130	20
2,4-Dimethylphenol	ND	50	48	4.1				30 - 130	20
2,4-Dinitrophenol	ND	23	<5	NC				30 - 130	20
2,4-Dinitrotoluene	ND	100	98	2.0				30 - 130	20
2,6-Dinitrotoluene	ND	98	96	2.1				30 - 130	20
2-Chloronaphthalene	ND	100	98	2.0				30 - 130	20
2-Chlorophenol	ND	84	84	0.0				30 - 130	20
2-Methylnaphthalene	ND	95	90	5.4				30 - 130	20

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2-Methylphenol (o-cresol)	ND	87	83	4.7				30 - 130	20
2-Nitroaniline	ND	>150	>150	NC				30 - 130	20
2-Nitrophenol	ND	99	95	4.1				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	91	91	0.0				30 - 130	20
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20
3-Nitroaniline	ND	104	102	1.9				30 - 130	20
4,6-Dinitro-2-methylphenol	ND	79	74	6.5				30 - 130	20
4-Bromophenyl phenyl ether	ND	93	90	3.3				30 - 130	20
4-Chloro-3-methylphenol	ND	105	101	3.9				30 - 130	20
4-Chloroaniline	ND	75	72	4.1				30 - 130	20
4-Chlorophenyl phenyl ether	ND	104	101	2.9				30 - 130	20
4-Nitroaniline	ND	104	102	1.9				30 - 130	20
4-Nitrophenol	ND	126	107	16.3				30 - 130	20
Acenaphthene	ND	99	97	2.0				30 - 130	20
Acenaphthylene	ND	95	94	1.1				30 - 130	20
Acetophenone	ND	50	50	0.0				30 - 130	20
Aniline	ND	N/A	N/A	NC				30 - 130	20
Anthracene	ND	97	95	2.1				30 - 130	20
Azobenzene	ND	54	52	3.8				30 - 130	20
Benz(a)anthracene	ND	103	100	3.0				30 - 130	20
Benzidine	ND	N/A	N/A	NC				30 - 130	20
Benzo(a)pyrene	ND	96	93	3.2				30 - 130	20
Benzo(b)fluoranthene	ND	102	100	2.0				30 - 130	20
Benzo(ghi)perylene	ND	99	92	7.3				30 - 130	20
Benzo(k)fluoranthene	ND	106	103	2.9				30 - 130	20
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20
Benzyl butyl phthalate	ND	99	96	3.1				30 - 130	20
Bis(2-chloroethoxy)methane	ND	97	92	5.3				30 - 130	20
Bis(2-chloroethyl)ether	ND	70	68	2.9				30 - 130	20
Bis(2-chloroisopropyl)ether	ND	96	94	2.1				30 - 130	20
Bis(2-ethylhexyl)phthalate	ND	105	101	3.9				30 - 130	20
Carbazole	ND	>150	>150	NC				30 - 130	20
Chrysene	ND	110	107	2.8				30 - 130	20
Dibenz(a,h)anthracene	ND	104	98	5.9				30 - 130	20
Dibenzofuran	ND	99	97	2.0				30 - 130	20
Diethyl phthalate	ND	104	100	3.9				30 - 130	20
Dimethylphthalate	ND	100	98	2.0				30 - 130	20
Di-n-butylphthalate	ND	111	108	2.7				30 - 130	20
Di-n-octylphthalate	ND	103	99	4.0				30 - 130	20
Fluoranthene	ND	104	101	2.9				30 - 130	20
Fluorene	ND	106	104	1.9				30 - 130	20
Hexachlorobenzene	ND	100	97	3.0				30 - 130	20
Hexachlorobutadiene	ND	89	84	5.8				30 - 130	20
Hexachlorocyclopentadiene	ND	36	32	11.8				30 - 130	20
Hexachloroethane	ND	85	84	1.2				30 - 130	20
Indeno(1,2,3-cd)pyrene	ND	102	97	5.0				30 - 130	20
Isophorone	ND	80	75	6.5				30 - 130	20
Naphthalene	ND	95	93	2.1				30 - 130	20
Nitrobenzene	ND	94	94	0.0				30 - 130	20
N-Nitrosodimethylamine	ND	66	68	3.0				30 - 130	20
N-Nitrosodi-n-propylamine	ND	105	113	7.3				30 - 130	20
N-Nitrosodiphenylamine	ND	109	107	1.9				30 - 130	20
Pentachloronitrobenzene	ND	106	103	2.9				30 - 130	20

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pentachlorophenol	ND	<5	<5	NC				30 - 130	20	l
Phenanthrene	ND	104	103	1.0				30 - 130	20	
Phenol	ND	77	78	1.3				30 - 130	20	
Pyrene	ND	106	103	2.9				30 - 130	20	
Pyridine	ND	<5	<5	NC				30 - 130	20	l
% 2,4,6-Tribromophenol	101	101	97	4.0				15 - 130	20	
% 2-Fluorobiphenyl	68	82	80	2.5				30 - 130	20	
% 2-Fluorophenol	73	68	68	0.0				15 - 130	20	
% Nitrobenzene-d5	79	85	84	1.2				30 - 130	20	
% Phenol-d5	74	69	68	1.5				15 - 130	20	
% Terphenyl-d14	99	113	108	4.5				30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198553, QC Sample No: BB72507 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

TPH by GC (Extractable Products) - Ground Water

Ext. Petroleum HC	ND	106	71	39.5				50 - 150	20	r
% n-Pentacosane	88	127	91	33.0				50 - 150	20	r

QA/QC Batch 198661, QC Sample No: BB72537 (BB72511)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	125	111	11.9	113	113	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	104	88	16.7	103	102	1.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	107	98	8.8	97	98	1.0	70 - 130	30	
1,1,2-Trichloroethane	ND	105	92	13.2	99	95	4.1	70 - 130	30	
1,1-Dichloroethane	ND	105	90	15.4	99	97	2.0	70 - 130	30	
1,1-Dichloroethene	ND	97	83	15.6	103	102	1.0	70 - 130	30	
1,1-Dichloropropene	ND	106	89	17.4	104	100	3.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	109	96	12.7	91	87	4.5	70 - 130	30	
1,2,3-Trichloropropane	ND	97	89	8.6	93	88	5.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	103	91	12.4	92	84	9.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	113	99	13.2	94	93	1.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	94	87	7.7	75	86	13.7	70 - 130	30	
1,2-Dichlorobenzene	ND	103	90	13.5	93	95	2.1	70 - 130	30	
1,2-Dichloroethane	ND	100	88	12.8	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	97	85	13.2	90	93	3.3	70 - 130	30	
1,3,5-Trimethylbenzene	ND	115	101	13.0	99	95	4.1	70 - 130	30	
1,3-Dichlorobenzene	ND	107	95	11.9	96	95	1.0	70 - 130	30	
1,3-Dichloropropane	ND	101	89	12.6	93	96	3.2	70 - 130	30	
1,4-Dichlorobenzene	ND	102	89	13.6	91	91	0.0	70 - 130	30	
2,2-Dichloropropane	ND	67	54	21.5	51	48	6.1	70 - 130	30	l,m
2-Chlorotoluene	ND	111	97	13.5	98	97	1.0	70 - 130	30	
2-Hexanone	ND	95	82	14.7	85	89	4.6	70 - 130	30	
2-Isopropyltoluene	ND	111	97	13.5	99	97	2.0	70 - 130	30	
4-Chlorotoluene	ND	109	95	13.7	100	96	4.1	70 - 130	30	
4-Methyl-2-pentanone	ND	92	84	9.1	90	91	1.1	70 - 130	30	
Acetone	ND	93	79	16.3	97	103	6.0	70 - 130	30	
Acrylonitrile	ND	98	88	10.8	87	92	5.6	70 - 130	30	
Benzene	ND	107	92	15.1	99	97	2.0	70 - 130	30	
Bromobenzene	ND	105	92	13.2	92	94	2.2	70 - 130	30	
Bromochloromethane	ND	104	89	15.5	98	97	1.0	70 - 130	30	
Bromodichloromethane	ND	96	82	15.7	94	103	9.1	70 - 130	30	
Bromoform	ND	117	107	8.9	105	109	3.7	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bromomethane	ND	92	80	14.0	78	87	10.9	70 - 130	30
Carbon Disulfide	ND	103	86	18.0	106	104	1.9	70 - 130	30
Carbon tetrachloride	ND	112	94	17.5	109	107	1.9	70 - 130	30
Chlorobenzene	ND	110	96	13.6	101	100	1.0	70 - 130	30
Chloroethane	ND	93	73	24.1	100	99	1.0	70 - 130	30
Chloroform	ND	105	90	15.4	96	97	1.0	70 - 130	30
Chloromethane	ND	96	81	16.9	96	91	5.3	70 - 130	30
cis-1,2-Dichloroethene	ND	105	94	11.1	101	102	1.0	70 - 130	30
cis-1,3-Dichloropropene	ND	100	87	13.9	90	90	0.0	70 - 130	30
Dibromochloromethane	ND	109	94	14.8	103	103	0.0	70 - 130	30
Dibromoethane	ND	106	95	10.9	98	97	1.0	70 - 130	30
Dibromomethane	ND	101	91	10.4	96	94	2.1	70 - 130	30
Dichlorodifluoromethane	ND	82	68	18.7	84	101	18.4	70 - 130	30
Ethylbenzene	ND	119	104	13.5	106	103	2.9	70 - 130	30
Hexachlorobutadiene	ND	96	82	15.7	93	81	13.8	70 - 130	30
Isopropylbenzene	ND	112	97	14.4	99	100	1.0	70 - 130	30
m&p-Xylene	ND	111	96	14.5	100	100	0.0	70 - 130	30
Methyl ethyl ketone	ND	103	93	10.2	96	96	0.0	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	87	77	12.2	77	77	0.0	70 - 130	30
Methylene chloride	ND	97	86	12.0	84	83	1.2	70 - 130	30
Naphthalene	ND	98	92	6.3	74	83	11.5	70 - 130	30
n-Butylbenzene	ND	110	96	13.6	98	91	7.4	70 - 130	30
n-Propylbenzene	ND	107	92	15.1	99	95	4.1	70 - 130	30
o-Xylene	ND	108	95	12.8	102	99	3.0	70 - 130	30
p-Isopropyltoluene	ND	117	100	15.7	99	95	4.1	70 - 130	30
sec-Butylbenzene	ND	111	96	14.5	100	98	2.0	70 - 130	30
Styrene	ND	108	97	10.7	95	92	3.2	70 - 130	30
tert-Butylbenzene	ND	108	94	13.9	99	98	1.0	70 - 130	30
Tetrachloroethene	ND	101	85	17.2	101	96	5.1	70 - 130	30
Tetrahydrofuran (THF)	ND	86	79	8.5	78	81	3.8	70 - 130	30
Toluene	ND	110	95	14.6	102	99	3.0	70 - 130	30
trans-1,2-Dichloroethene	ND	108	89	19.3	103	99	4.0	70 - 130	30
trans-1,3-Dichloropropene	ND	103	87	16.8	90	90	0.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	92	90	2.2	72	75	4.1	70 - 130	30
Trichloroethene	ND	110	92	17.8	104	101	2.9	70 - 130	30
Trichlorofluoromethane	ND	111	92	18.7	108	104	3.8	70 - 130	30
Trichlorotrifluoroethane	ND	95	78	19.7	104	95	9.0	70 - 130	30
Vinyl chloride	ND	95	81	15.9	104	101	2.9	70 - 130	30
% 1,2-dichlorobenzene-d4	96	100	98	2.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	89	95	96	1.0	103	102	1.0	70 - 130	30
% Dibromofluoromethane	93	98	98	0.0	101	101	0.0	70 - 130	30
% Toluene-d8	99	99	100	1.0	100	100	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198849, QC Sample No: BB72816 (BB72509, BB72510)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	120	114	5.1	110	113	2.7	70 - 130	30
1,1,1-Trichloroethane	ND	98	89	9.6	87	94	7.7	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	100	100	0.0	101	104	2.9	70 - 130	30
1,1,2-Trichloroethane	ND	103	97	6.0	99	104	4.9	70 - 130	30
1,1-Dichloroethane	ND	97	87	10.9	87	94	7.7	70 - 130	30
1,1-Dichloroethene	ND	92	83	10.3	87	96	9.8	70 - 130	30

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	100	87	13.9	87	95	8.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	100	99	1.0	94	109	14.8	70 - 130	30	
1,2,3-Trichloropropane	ND	91	92	1.1	91	94	3.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	96	95	1.0	93	104	11.2	70 - 130	30	
1,2,4-Trimethylbenzene	ND	105	97	7.9	95	97	2.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	91	94	3.2	87	99	12.9	70 - 130	30	
1,2-Dichlorobenzene	ND	97	94	3.1	94	97	3.1	70 - 130	30	
1,2-Dichloroethane	ND	95	90	5.4	93	97	4.2	70 - 130	30	
1,2-Dichloropropane	ND	91	84	8.0	94	97	3.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	106	99	6.8	93	96	3.2	70 - 130	30	
1,3-Dichlorobenzene	ND	100	96	4.1	95	98	3.1	70 - 130	30	
1,3-Dichloropropane	ND	93	92	1.1	94	98	4.2	70 - 130	30	
1,4-Dichlorobenzene	ND	95	91	4.3	90	92	2.2	70 - 130	30	
2,2-Dichloropropane	ND	55	47	15.7	41	45	9.3	70 - 130	30	l,m
2-Chlorotoluene	ND	102	96	6.1	92	97	5.3	70 - 130	30	
2-Hexanone	ND	83	86	3.6	89	96	7.6	70 - 130	30	
2-Isopropyltoluene	ND	104	96	8.0	94	98	4.2	70 - 130	30	
4-Chlorotoluene	ND	101	96	5.1	95	99	4.1	70 - 130	30	
4-Methyl-2-pentanone	ND	88	90	2.2	95	99	4.1	70 - 130	30	
Acetone	ND	88	93	5.5	95	101	6.1	70 - 130	30	
Acrylonitrile	ND	87	92	5.6	96	99	3.1	70 - 130	30	
Benzene	ND	103	90	13.5	90	95	5.4	70 - 130	30	
Bromobenzene	ND	98	94	4.2	93	95	2.1	70 - 130	30	
Bromochloromethane	ND	99	92	7.3	96	99	3.1	70 - 130	30	
Bromodichloromethane	ND	90	87	3.4	110	115	4.4	70 - 130	30	
Bromoform	ND	113	108	4.5	113	114	0.9	70 - 130	30	
Bromomethane	ND	85	77	9.9	68	79	15.0	70 - 130	30	m
Carbon Disulfide	ND	96	86	11.0	92	102	10.3	70 - 130	30	
Carbon tetrachloride	ND	105	92	13.2	92	100	8.3	70 - 130	30	
Chlorobenzene	ND	104	95	9.0	97	100	3.0	70 - 130	30	
Chloroethane	ND	94	76	21.2	87	93	6.7	70 - 130	30	
Chloroform	ND	98	91	7.4	90	96	6.5	70 - 130	30	
Chloromethane	ND	88	78	12.0	80	90	11.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	95	87	8.8	89	95	6.5	70 - 130	30	
Dibromochloromethane	ND	104	101	2.9	107	110	2.8	70 - 130	30	
Dibromoethane	ND	102	100	2.0	102	106	3.8	70 - 130	30	
Dibromomethane	ND	99	94	5.2	101	105	3.9	70 - 130	30	
Dichlorodifluoromethane	ND	78	66	16.7	87	96	9.8	70 - 130	30	l
Ethylbenzene	ND	113	102	10.2	97	100	3.0	70 - 130	30	
Hexachlorobutadiene	ND	88	81	8.3	85	94	10.1	70 - 130	30	
Isopropylbenzene	ND	103	95	8.1	92	98	6.3	70 - 130	30	
m&p-Xylene	ND	108	98	9.7	97	100	3.0	70 - 130	30	
Methyl ethyl ketone	ND	97	92	5.3	104	109	4.7	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	79	76	3.9	82	85	3.6	70 - 130	30	
Methylene chloride	ND	91	90	1.1	87	89	2.3	70 - 130	30	
Naphthalene	ND	90	96	6.5	80	98	20.2	70 - 130	30	
n-Butylbenzene	ND	100	93	7.3	91	96	5.3	70 - 130	30	
n-Propylbenzene	ND	97	92	5.3	92	92	0.0	70 - 130	30	
o-Xylene	ND	105	97	7.9	98	102	4.0	70 - 130	30	
p-Isopropyltoluene	ND	108	100	7.7	93	97	4.2	70 - 130	30	
sec-Butylbenzene	ND	102	95	7.1	94	98	4.2	70 - 130	30	
Styrene	ND	102	98	4.0	96	99	3.1	70 - 130	30	
tert-Butylbenzene	ND	101	94	7.2	91	95	4.3	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Tetrachloroethene	ND	97	87	10.9	91	97	6.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	78	82	5.0	83	85	2.4	70 - 130	30	
Toluene	ND	109	97	11.7	94	102	8.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	99	89	10.6	89	96	7.6	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	91	5.3	95	96	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	87	82	5.9	76	89	15.8	70 - 130	30	
Trichlorofluoromethane	ND	105	92	13.2	86	93	7.8	70 - 130	30	
Trichlorotrifluoroethane	ND	88	79	10.8	87	96	9.8	70 - 130	30	
Vinyl chloride	ND	90	79	13.0	85	94	10.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	99	100	1.0	100	101	1.0	70 - 130	30	
% Bromofluorobenzene	89	98	97	1.0	102	103	1.0	70 - 130	30	
% Dibromofluoromethane	96	97	99	2.0	100	101	1.0	70 - 130	30	
% Toluene-d8	98	102	100	2.0	101	102	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198811, QC Sample No: BB73633 (BB72506, BB72507, BB72509 (20X) , BB72510 (20X))

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	115	118	2.6	116	117	0.9	70 - 130	30	
1,1,1-Trichloroethane	ND	93	98	5.2	93	96	3.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	105	110	4.7	98	99	1.0	70 - 130	30	
1,1,2-Trichloroethane	ND	106	112	5.5	95	97	2.1	70 - 130	30	
1,1-Dichloroethane	ND	92	96	4.3	90	92	2.2	70 - 130	30	
1,1-Dichloroethene	ND	87	92	5.6	89	94	5.5	70 - 130	30	
1,1-Dichloropropene	ND	93	96	3.2	91	93	2.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	109	120	9.6	94	98	4.2	70 - 130	30	
1,2,3-Trichloropropane	ND	97	102	5.0	91	86	5.6	70 - 130	30	
1,2,4-Trichlorobenzene	ND	104	112	7.4	93	94	1.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	102	105	2.9	99	100	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	104	106	1.9	83	90	8.1	70 - 130	30	
1,2-Dichlorobenzene	ND	100	104	3.9	95	96	1.0	70 - 130	30	
1,2-Dichloroethane	ND	96	99	3.1	94	92	2.2	70 - 130	30	
1,2-Dichloropropane	ND	104	99	4.9	85	87	2.3	70 - 130	30	
1,3,5-Trimethylbenzene	ND	100	105	4.9	98	100	2.0	70 - 130	30	
1,3-Dichlorobenzene	ND	101	105	3.9	97	99	2.0	70 - 130	30	
1,3-Dichloropropane	ND	102	105	2.9	93	92	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	95	99	4.1	92	94	2.2	70 - 130	30	
2,2-Dichloropropane	ND	76	80	5.1	57	59	3.4	70 - 130	30	m
2-Chlorotoluene	ND	99	102	3.0	97	100	3.0	70 - 130	30	
2-Hexanone	ND	95	93	2.1	81	85	4.8	70 - 130	30	
2-Isopropyltoluene	ND	100	102	2.0	100	116	14.8	70 - 130	30	
4-Chlorotoluene	ND	97	102	5.0	100	100	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	97	103	6.0	87	89	2.3	70 - 130	30	
Acetone	ND	97	96	1.0	86	85	1.2	70 - 130	30	
Acrylonitrile	ND	101	99	2.0	91	85	6.8	70 - 130	30	
Benzene	ND	96	99	3.1	93	95	2.1	70 - 130	30	
Bromobenzene	ND	98	102	4.0	94	95	1.1	70 - 130	30	
Bromochloromethane	ND	100	105	4.9	96	95	1.0	70 - 130	30	
Bromodichloromethane	ND	116	105	10.0	92	93	1.1	70 - 130	30	
Bromoform	ND	112	122	8.5	109	112	2.7	70 - 130	30	
Bromomethane	ND	81	60	29.8	60	74	20.9	70 - 130	30	l,m
Carbon Disulfide	ND	89	95	6.5	93	98	5.2	70 - 130	30	
Carbon tetrachloride	ND	98	102	4.0	98	101	3.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Chlorobenzene	ND	99	103	4.0	101	103	2.0	70 - 130	30
Chloroethane	ND	85	86	1.2	84	86	2.4	70 - 130	30
Chloroform	ND	96	100	4.1	93	94	1.1	70 - 130	30
Chloromethane	ND	79	84	6.1	80	83	3.7	70 - 130	30
cis-1,2-Dichloroethene	ND	96	101	5.1	92	95	3.2	70 - 130	30
cis-1,3-Dichloropropene	ND	102	107	4.8	90	92	2.2	70 - 130	30
Dibromochloromethane	ND	112	118	5.2	106	105	0.9	70 - 130	30
Dibromoethane	ND	109	111	1.8	99	99	0.0	70 - 130	30
Dibromomethane	ND	109	105	3.7	95	94	1.1	70 - 130	30
Dichlorodifluoromethane	ND	77	76	1.3	76	82	7.6	70 - 130	30
Ethylbenzene	ND	101	107	5.8	107	109	1.9	70 - 130	30
Hexachlorobutadiene	ND	92	95	3.2	89	91	2.2	70 - 130	30
Isopropylbenzene	ND	96	102	6.1	98	100	2.0	70 - 130	30
m&p-Xylene	ND	100	102	2.0	101	104	2.9	70 - 130	30
Methyl ethyl ketone	ND	112	109	2.7	93	101	8.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	84	88	4.7	77	76	1.3	70 - 130	30
Methylene chloride	ND	90	92	2.2	89	92	3.3	70 - 130	30
Naphthalene	ND	100	114	13.1	76	86	12.3	70 - 130	30
n-Butylbenzene	ND	100	104	3.9	96	100	4.1	70 - 130	30
n-Propylbenzene	ND	94	96	2.1	98	101	3.0	70 - 130	30
o-Xylene	ND	100	104	3.9	101	103	2.0	70 - 130	30
p-Isopropyltoluene	ND	105	108	2.8	98	100	2.0	70 - 130	30
sec-Butylbenzene	ND	97	101	4.0	98	99	1.0	70 - 130	30
Styrene	ND	97	103	6.0	98	101	3.0	70 - 130	30
tert-Butylbenzene	ND	96	99	3.1	96	99	3.1	70 - 130	30
Tetrachloroethene	ND	94	101	7.2	94	98	4.2	70 - 130	30
Tetrahydrofuran (THF)	ND	89	93	4.4	76	78	2.6	70 - 130	30
Toluene	ND	102	107	4.8	97	100	3.0	70 - 130	30
trans-1,2-Dichloroethene	ND	94	99	5.2	92	96	4.3	70 - 130	30
trans-1,3-Dichloropropene	ND	108	113	4.5	93	93	0.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	112	120	6.9	77	84	8.7	70 - 130	30
Trichloroethene	ND	97	102	5.0	97	102	5.0	70 - 130	30
Trichlorofluoromethane	ND	102	105	2.9	87	89	2.3	70 - 130	30
Trichlorotrifluoroethane	ND	91	93	2.2	87	93	6.7	70 - 130	30
Vinyl chloride	ND	85	88	3.5	82	88	7.1	70 - 130	30
% 1,2-dichlorobenzene-d4	100	100	102	2.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	93	101	100	1.0	98	99	1.0	70 - 130	30
% Dibromofluoromethane	98	101	103	2.0	100	99	1.0	70 - 130	30
% Toluene-d8	102	101	102	1.0	99	99	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198978, QC Sample No: BB74166 (BB72508)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	117	118	0.9	118	119	0.8	70 - 130	30
1,1,1-Trichloroethane	ND	94	94	0.0	94	100	6.2	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	100	100	0.0	100	106	5.8	70 - 130	30
1,1,2-Trichloroethane	ND	103	103	0.0	100	106	5.8	70 - 130	30
1,1-Dichloroethane	ND	92	94	2.2	90	96	6.5	70 - 130	30
1,1-Dichloroethene	ND	89	91	2.2	91	99	8.4	70 - 130	30
1,1-Dichloropropene	ND	94	95	1.1	92	99	7.3	70 - 130	30
1,2,3-Trichlorobenzene	ND	108	113	4.5	94	110	15.7	70 - 130	30
1,2,3-Trichloropropane	ND	95	91	4.3	92	96	4.3	70 - 130	30

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,4-Trichlorobenzene	ND	101	107	5.8	94	103	9.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	98	102	4.0	99	105	5.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	96	105	9.0	111	93	17.6	70 - 130	30	
1,2-Dichlorobenzene	ND	93	98	5.2	96	101	5.1	70 - 130	30	
1,2-Dichloroethane	ND	96	96	0.0	94	96	2.1	70 - 130	30	
1,2-Dichloropropane	ND	87	96	9.8	86	90	4.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	99	101	2.0	99	104	4.9	70 - 130	30	
1,3-Dichlorobenzene	ND	97	101	4.0	98	104	5.9	70 - 130	30	
1,3-Dichloropropane	ND	97	99	2.0	91	96	5.3	70 - 130	30	
1,4-Dichlorobenzene	ND	92	97	5.3	93	98	5.2	70 - 130	30	
2,2-Dichloropropane	ND	97	98	1.0	63	67	6.2	70 - 130	30	m
2-Chlorotoluene	ND	97	100	3.0	98	102	4.0	70 - 130	30	
2-Hexanone	ND	94	95	1.1	81	89	9.4	70 - 130	30	
2-Isopropyltoluene	ND	96	101	5.1	98	104	5.9	70 - 130	30	
4-Chlorotoluene	ND	95	97	2.1	100	106	5.8	70 - 130	30	
4-Methyl-2-pentanone	ND	92	94	2.2	89	96	7.6	70 - 130	30	
Acetone	ND	87	90	3.4	85	88	3.5	70 - 130	30	
Acrylonitrile	ND	96	99	3.1	93	90	3.3	70 - 130	30	
Benzene	ND	95	98	3.1	94	101	7.2	70 - 130	30	
Bromobenzene	ND	93	99	6.3	93	98	5.2	70 - 130	30	
Bromochloromethane	ND	100	99	1.0	96	102	6.1	70 - 130	30	
Bromodichloromethane	ND	95	106	10.9	89	92	3.3	70 - 130	30	
Bromoform	ND	116	118	1.7	111	116	4.4	70 - 130	30	
Bromomethane	ND	67	85	23.7	63	76	18.7	70 - 130	30	l,m
Carbon Disulfide	ND	94	96	2.1	93	100	7.3	70 - 130	30	
Carbon tetrachloride	ND	100	100	0.0	101	106	4.8	70 - 130	30	
Chlorobenzene	ND	99	100	1.0	102	108	5.7	70 - 130	30	
Chloroethane	ND	86	90	4.5	90	97	7.5	70 - 130	30	
Chloroform	ND	96	97	1.0	94	99	5.2	70 - 130	30	
Chloromethane	ND	86	91	5.6	79	61	25.7	70 - 130	30	m
cis-1,2-Dichloroethene	ND	95	97	2.1	96	102	6.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	105	107	1.9	92	98	6.3	70 - 130	30	
Dibromochloromethane	ND	108	113	4.5	103	108	4.7	70 - 130	30	
Dibromoethane	ND	107	107	0.0	102	109	6.6	70 - 130	30	
Dibromomethane	ND	101	103	2.0	95	101	6.1	70 - 130	30	
Dichlorodifluoromethane	ND	97	94	3.1	86	71	19.1	70 - 130	30	
Ethylbenzene	ND	104	105	1.0	108	112	3.6	70 - 130	30	
Hexachlorobutadiene	ND	89	97	8.6	90	97	7.5	70 - 130	30	
Isopropylbenzene	ND	94	98	4.2	96	102	6.1	70 - 130	30	
m&p-Xylene	ND	102	103	1.0	103	106	2.9	70 - 130	30	
Methyl ethyl ketone	ND	104	102	1.9	105	103	1.9	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	91	94	3.2	79	85	7.3	70 - 130	30	
Methylene chloride	ND	89	92	3.3	87	91	4.5	70 - 130	30	
Naphthalene	ND	98	103	5.0	77	95	20.9	70 - 130	30	
n-Butylbenzene	ND	99	103	4.0	96	102	6.1	70 - 130	30	
n-Propylbenzene	ND	93	94	1.1	99	103	4.0	70 - 130	30	
o-Xylene	ND	100	102	2.0	104	105	1.0	70 - 130	30	
p-Isopropyltoluene	ND	102	106	3.8	98	102	4.0	70 - 130	30	
sec-Butylbenzene	ND	95	98	3.1	98	104	5.9	70 - 130	30	
Styrene	ND	100	97	3.0	104	109	4.7	70 - 130	30	
tert-Butylbenzene	ND	93	96	3.2	97	101	4.0	70 - 130	30	
Tetrachloroethene	ND	97	98	1.0	95	99	4.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	89	85	4.6	77	86	11.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72506

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Toluene	ND	103	106	2.9	104	109	4.7	70 - 130	30
trans-1,2-Dichloroethene	ND	93	97	4.2	96	102	6.1	70 - 130	30
trans-1,3-Dichloropropene	ND	111	114	2.7	97	102	5.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	121	112	7.7	90	88	2.2	70 - 130	30
Trichloroethene	ND	100	102	2.0	100	105	4.9	70 - 130	30
Trichlorofluoromethane	ND	105	104	1.0	92	96	4.3	70 - 130	30
Trichlorotrifluoroethane	ND	94	91	3.2	94	102	8.2	70 - 130	30
Vinyl chloride	ND	90	94	4.3	87	95	8.8	70 - 130	30
% 1,2-dichlorobenzene-d4	100	96	99	3.1	99	100	1.0	70 - 130	30
% Bromofluorobenzene	91	101	100	1.0	100	100	0.0	70 - 130	30
% Dibromofluoromethane	99	100	98	2.0	101	101	0.0	70 - 130	30
% Toluene-d8	105	102	100	2.0	104	104	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 25, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP

GBB72506

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB72506	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB72506	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB72506	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72506	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72506	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB72506	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.045	0.002	0.015	0.015	mg/L
BB72507	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB72507	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB72507	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72507	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72507	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB72508	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB72508	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	10	1.0	5	5	ug/L
BB72508	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB72508	MAGU-DAS	$8260GWR	Tetrachloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	7.9	1.0	5	5	ug/L
BB72508	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72508	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72508	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB72508	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.008	0.001	0.005	0.005	mg/L
BB72508	MAGU-DAS	D-CD	Cadmium (Dissolved)	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.006	0.001	0.005	0.005	mg/L
BB72509	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	10	0.5	0.5	ug/L
BB72509	MAGU-DAS	$8260GWR	cis-1,2-Dichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	91	20.0	70	70	ug/L
BB72509	MAGU-DAS	$8260GWR	Tetrahydrofuran (THF)	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	10	5	5	ug/L
BB72509	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	260	20.0	5	5	ug/L
BB72509	MAGU-DAS	$8260GWR	Bromodichloromethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.56	0.56	ug/L
BB72509	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	2.0	0.05	0.05	ug/L
BB72509	MAGU-DAS	$8260GWR	Dibromochloromethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB72509	MAGU-DAS	$8260GWR	1,1,2,2-Tetrachloroethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB72509	MAGU-DAS	$8260GWR	Hexachlorobutadiene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	0.80	0.45	0.45	ug/L
BB72509	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72509	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72509	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB72510	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	10	0.5	0.5	ug/L
BB72510	MAGU-DAS	$8260GWR	cis-1,2-Dichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	96	20.0	70	70	ug/L
BB72510	MAGU-DAS	$8260GWR	Tetrahydrofuran (THF)	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	10	5	5	ug/L
BB72510	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	280	20.0	5	5	ug/L
BB72510	MAGU-DAS	$8260GWR	Bromodichloromethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.56	0.56	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP

GBB72506

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB72510	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	2.0	0.05	0.05	ug/L
BB72510	MAGU-DAS	$8260GWR	Dibromochloromethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB72510	MAGU-DAS	$8260GWR	1,1,1,2-Tetrachloroethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	2.0	1	1	ug/L
BB72510	MAGU-DAS	$8260GWR	1,1,2,2-Tetrachloroethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB72510	MAGU-DAS	$8260GWR	Hexachlorobutadiene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	0.80	0.45	0.45	ug/L
BB72510	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72510	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72510	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB72510	MAGU-DAS	D-CD	Cadmium (Dissolved)	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.007	0.001	0.005	0.005	mg/L
BB72511	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB72511	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB72512	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB72512	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB72512	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB72512	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB72512	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD **Project Number:**

Laboratory Sample ID(s): BB72506, BB72507, BB72508, BB72509, BB72510, BB72511, BB72512

Sampling Date(s): 4/13/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, Herbicide Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Wednesday, April 25, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Nov 2007

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

The client requested a shorter list of elements than the 6010 RCP list.

Not all constituents met requested criteria due to the presence of target and non target compounds causing a necessary dilution.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
Pyridine, Aniline and 3,3 -Dichlorobenzidine reporting levels do not meet GWPC criteria.

Selenium Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Zeeman 04/17/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The initial calibration met all criteria including a standard run at the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/17/2012

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198553 (Samples: BB72506, BB72507, BB72508, BB72509, BB72510, BB72512): -----

One or more surrogates is outside of criteria. (% n-Pentacosane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Ext. Petroleum HC)

Instrument: Au-fid84 04/18/12-2 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98553 04/17/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB72507, QA/QC Batch: 198553 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % n-Pentacosane(33.0%), Ext. Petroleum HC(39.5%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198190 (Samples: BB72506, BB72507, BB72508, BB72509, BB72510, BB72512): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Dinoseb)

Instrument: Au-ecd14 04/18/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

Initial Calibration ECD14-041812
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98190 04/12/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

QC (Batch Specific)

---------- Sample No: BB70278, QA/QC Batch: 198190 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: Dinoseb(46.2%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/17/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/17/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

QC (Site Specific)

---------- Sample No: BB72508, QA/QC Batch: 198495 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB72366, QA/QC Batch: 198494 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 04/16/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/16/2012

Instrument: Icp9 04/17/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

Printed Name Laura Kinnin
Position: Chemist
Date: 4/17/2012

Instrument: Icp9 04/18/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/18/2012

Instrument: Icp9 04/19/12-1 (BB72509, BB72510, BB72512)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/19/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

QC (Batch Specific)

---------- Sample No: BB72354, QA/QC Batch: 198476 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB72731, QA/QC Batch: 198477 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB72740, QA/QC Batch: 198485 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 04/16/12-1 (BB72507, BB72508, BB72509, BB72510, BB72512)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/16/2012

Instrument: Au-ecd7 04/18/12-1 (BB72506)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

Printed Name Michael Hahn
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98483 04/16/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB72503, QA/QC Batch: 198483 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 04/18/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Printed Name Mark Rochette
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98484 04/16/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

QC (Batch Specific)

---------- Sample No: BB71790, QA/QC Batch: 198484 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198458 (Samples: BB72506, BB72507, BB72508, BB72509, BB72510, BB72512): -----

The LCS and/or LCSD recovery for one or more analytes is below the method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, Pentachlorophenol, Pyridine)

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, Carbazole)

Instrument: Chem06 04/18/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem06/SV_0411)
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Benzoic Acid, 4-chloroaniline, Hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrotoluene, 2-nitroaniline, N-nitrosodiphenylamine, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: 3-Nitroaniline

Printed Name Damien Drobinski
Position: Chemist
Date: 4/18/2012

Instrument: Chem12 04/18/12-1 (BB72506)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0417):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, Pentachlorophenol, Carbazole

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene, % 2,4,6-tribromophenol

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: 2,4-Dinitrophenol, 4-Nitrophenol, Pentachlorophenol

Printed Name Damien Drobinski
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98458 04/16/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB72506, QA/QC Batch: 198458 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(23%), 2-Nitroaniline(>150%), Carbazole(>150%), Pentachlorophenol(<5%), Pyridine(<5%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), Carbazole(>150%), Pentachlorophenol(<5%), Pyridine(<5%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 04/17/12-1 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0416):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: None

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Pentachlorophenol

Printed Name Damien Drobinski
Position: Chemist
Date: 4/17/2012

QC Comments: QC Batch 98458 04/16/12 (BB72506, BB72507, BB72508, BB72509, BB72510, BB72512)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198621 (Samples: BB72512): -----

The LCS and/or LCSD recovery for one or more analytes is below the lower range, but within the method criteria. A low bias for these compounds is possible. (2,2-Dichloropropane)

The LCS and/or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Naphthalene, Styrene)

QC Batch 198661 (Samples: BB72511): -----

The LCS and/or LCSD for one or more analytes is below the lower range, but within the method criteria. A low bias for these compounds is possible (Dichlorodifluoromethane,2,2-Dichloropropane)

QC Batch 198811 (Samples: BB72506, BB72507, BB72509, BB72510): -----

The LCS and/or LCSD recoveries for one or more compounds are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

QC Batch 198849 (Samples: BB72509, BB72510): -----

The LCS and/or LCSD recoveries for one or more analytes is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichlorodifluoromethane)

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane)

QC Batch 198978 (Samples: BB72508): -----

The LCS and/or LCSD recoveries for one or more analytes are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

Instrument: Chem02 04/17/12-1 (BB72512)

P-Side
Initial Calibration (RPP_0416):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Bromomethane, Chloroethane, Acetone, Methylene Chloride, 2,2-dichloropropane, O-xylene, Styrene, 1,3,5-trimethylbenzene, Trans-1,4-dichloro-2-butene, Tert-butylbenzene, P-isopropyltoluene, N-butylbenzene, 1,2,4-trichlorobenzene, Naphthalene, 1,2,3-trichlorobenzene
Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations >30%:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

Printed Name Tina Covensky
Position: Chemist
Date: 4/17/2012

Instrument: Chem08 04/16/12-2 (BB72511)

S -Side
Initial Calibration(RCPS_0416):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methyl Ethyl Ketone, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations:

Printed Name Tina Covensky
Position: Chemist
Date: 4/16/2012

Instrument: Chem08 04/18/12-2 (BB72509, BB72510)

S -Side
Initial Calibration(RCPS_0416):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methyl Ethyl Ketone, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: 2,2-Dichloropropane

Printed Name Tina Covensky
Position: Chemist
Date: 4/18/2012

Instrument: Chem08 04/19/12-1 (BB72506, BB72507, BB72509, BB72510)

S -Side
Initial Calibration(RCPS_0416):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methyl Ethyl Ketone, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

Printed Name Tina Covensky
Position: Chemist
Date: 4/19/2012

Instrument: Chem08 04/21/12-1 (BB72508)

S -Side
Initial Calibration(RCPS_0416):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methyl Ethyl Ketone, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations:

Printed Name Tina Covensky
Position: Chemist
Date: 4/21/2012

QC Comments: QC Batch 98621 04/18/12 (BB72512)

Due to poor instrument purge, the MS/MSD is not reported for this batch.

QC Comments: QC Batch 98811 04/20/12 (BB72506, BB72507, BB72509, BB72510)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98849 04/20/12 (BB72509, BB72510)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98978 04/23/12 (BB72508)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72506

QC (Batch Specific)

---------- Sample No: BB72463, QA/QC Batch: 198621 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Naphthalene(140%), Styrene(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Naphthalene(148%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB72537, QA/QC Batch: 198661 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(54%), Dichlorodifluoromethane(68%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB72816, QA/QC Batch: 198849 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(55%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(47%), Dichlorodifluoromethane(66%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB73633, QA/QC Batch: 198811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromomethane(60%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB74166, QA/QC Batch: 198978 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromomethane(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: ~~[illegible]~~ Metro North Railroad Cat. Project
Report to: Jane Witherell - Maguire Group
Invoice to: DAS Contract - CTDOT c/o MGI

Project ~~P.O.~~: 301-145 301-40
Phone #: 860 2249141
Fax #: 860 2249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-13-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
72506	GB-32 GW	GW	4-13-12	6:21am	X	X	X	X	X	X	X						3	6			2
72507	GB-34 GW	↓	↓	7:32am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
72508	GB-53 GW	↓	↓	8:49am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
72509	GB-54 GW	↓	↓	10:31am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
72510	GB-55 GW	↓	↓	12:47pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
72511	TB-4	↓	↓	-	↓												2				
72512	FB-1	GW	↓	2:19pm	X	X	X	X	X	X	X						3	6			2

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/16/12	11:10
[signature]	T. [signature]	4-16-12	1547

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☒ Other General Permit Disch

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Wednesday, April 25, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY
Sample ID#s: BB72837 - BB72845

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	13:21
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72837

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-65 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Arsenic	10.7	0.67	mg/Kg	04/18/12		LK	6010
Barium	24.8	0.34	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Chromium	8.95	0.34	mg/Kg	04/18/12		LK	6010
Mercury	< 0.06	0.06	mg/Kg	04/18/12		RS	SW-7471
Lead	8.46	0.34	mg/Kg	04/18/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	0.023	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	0.013	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	94		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-65 3-5 FT

Phoenix I.D.: BB72837

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	88	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	88	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	60		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	135		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	96		%	04/18/12		MH	30 - 150 %
% TCMX	70		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-65 3-5 FT

Phoenix I.D.: BB72837

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	77		%	04/18/12		MR	30 - 150 %
% TCMX	82		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/19/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/19/12		R/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/19/12		R/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		R/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Benzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Bromoform	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Bromomethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Chloroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Chloroform	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Chloromethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/19/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-65 3-5 FT

Phoenix I.D.: BB72837

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
m&p-Xylene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/19/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Naphthalene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
o-Xylene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Styrene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Toluene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Total Xylenes	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		R/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	04/19/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/19/12		R/J	70 - 130 %
% Bromofluorobenzene	89		%	04/19/12		R/J	70 - 130 %
% Dibromofluoromethane	102		%	04/19/12		R/J	70 - 130 %
% Toluene-d8	100		%	04/19/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-65 3-5 FT

Phoenix I.D.: BB72837

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/17/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/17/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/17/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/17/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/17/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-65 3-5 FT

Phoenix I.D.: BB72837

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/17/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/17/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	43		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	65		%	04/17/12		DD	15 - 130 %
% Phenol-d5	72		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	13:00
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72838

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-66 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Arsenic	1.79	0.68	mg/Kg	04/18/12		LK	6010
Barium	23.9	0.34	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Chromium	8.88	0.34	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	8.41	0.34	mg/Kg	04/18/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	95		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/19/12		SS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-66 3-5 FT

Phoenix I.D.: BB72838

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	65		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/20/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/20/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	66		%	04/20/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	112		%	04/18/12		MH	30 - 150 %
% TCMX	90		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/18/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-66 3-5 FT

Phoenix I.D.: BB72838

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	80		%	04/18/12		MR	30 - 150 %
% TCMX	87		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	04/19/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2-Hexanone	ND	27	ug/Kg	04/19/12		R/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	04/19/12		R/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		R/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Benzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromoform	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromomethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloroform	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	04/19/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-66 3-5 FT

Phoenix I.D.: BB72838

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	04/19/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Naphthalene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
o-Xylene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Styrene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Toluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		R/J	SW8260
Trichloroethene	14	5.5	ug/Kg	04/19/12		R/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	106		%	04/19/12		R/J	70 - 130 %
% Bromofluorobenzene	84		%	04/19/12		R/J	70 - 130 %
% Dibromofluoromethane	104		%	04/19/12		R/J	70 - 130 %
% Toluene-d8	98		%	04/19/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-66 3-5 FT

Phoenix I.D.: BB72838

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/17/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/17/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/17/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/17/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/17/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/17/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-66 3-5 FT

Phoenix I.D.: BB72838

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/17/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/17/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	46		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	78		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	04/17/12		DD	15 - 130 %
% Phenol-d5	76		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	103		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	12:24
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72839

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-67 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Arsenic	1.59	0.69	mg/Kg	04/18/12		LK	6010
Barium	19.0	0.34	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Chromium	6.29	0.34	mg/Kg	04/18/12		LK	6010
Mercury	< 0.06	0.06	mg/Kg	04/18/12		RS	SW-7471
Lead	4.89	0.34	mg/Kg	04/18/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	96		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-67 3-5 FT

Phoenix I.D.: BB72839

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	66		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	60		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	102		%	04/18/12		MH	30 - 150 %
% TCMX	80		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/18/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	80		%	04/18/12		MR	30 - 150 %
% TCMX	83		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.1	ug/Kg	04/19/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloropropene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloropropane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichloropropane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
2,2-Dichloropropane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
2-Chlorotoluene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
2-Hexanone	ND	26	ug/Kg	04/19/12		R/J	SW8260
2-Isopropyltoluene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
4-Chlorotoluene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	04/19/12		R/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		R/J	SW8260
Acrylonitrile	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Benzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Bromobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Bromochloromethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Bromodichloromethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Bromoform	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Bromomethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Carbon Disulfide	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Carbon tetrachloride	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Chlorobenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Chloroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Chloroform	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Chloromethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Dibromochloromethane	ND	3.1	ug/Kg	04/19/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Dibromomethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Ethylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Hexachlorobutadiene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Isopropylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
m&p-Xylene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	04/19/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		R/J	SW8260
Methylene chloride	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Naphthalene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
n-Butylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
n-Propylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
o-Xylene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
p-Isopropyltoluene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
sec-Butylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Styrene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
tert-Butylbenzene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Tetrachloroethene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		R/J	SW8260
Toluene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Total Xylenes	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		R/J	SW8260
Trichloroethene	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Trichlorofluoromethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
Vinyl chloride	ND	5.1	ug/Kg	04/19/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	04/19/12		R/J	70 - 130 %
% Bromofluorobenzene	90		%	04/19/12		R/J	70 - 130 %
% Dibromofluoromethane	106		%	04/19/12		R/J	70 - 130 %
% Toluene-d8	100		%	04/19/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrophenol	ND	540	ug/Kg	04/17/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-67 3-5 FT

Phoenix I.D.: BB72839

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/17/12		DD	SW 8270
2-Nitroaniline	ND	540	ug/Kg	04/17/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/17/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/17/12		DD	SW 8270
3-Nitroaniline	ND	540	ug/Kg	04/17/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	04/17/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/17/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
4-Nitroaniline	ND	540	ug/Kg	04/17/12		DD	SW 8270
4-Nitrophenol	ND	990	ug/Kg	04/17/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Aniline	ND	990	ug/Kg	04/17/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/17/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/17/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Benzoic acid	ND	990	ug/Kg	04/17/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/17/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/17/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Carbazole	ND	510	ug/Kg	04/17/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/17/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/17/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/17/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/17/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-67 3-5 FT

Phoenix I.D.: BB72839

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/17/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/17/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/17/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/17/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/17/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/17/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	42		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	77		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	75		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	68		%	04/17/12		DD	15 - 130 %
% Phenol-d5	74		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	100		%	04/17/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	11:57
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72840

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-68 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	04/18/12		LK	6010
Arsenic	3.99	0.75	mg/Kg	04/18/12		LK	6010
Barium	31.6	0.37	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.37	0.37	mg/Kg	04/18/12		LK	6010
Chromium	10.9	0.37	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	7.06	0.37	mg/Kg	04/18/12		LK	6010
Selenium	< 1.5	1.5	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	0.025	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	0.011	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	93		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-68 3-5 FT

Phoenix I.D.: BB72840

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	89	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	89	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	64		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	67		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	106		%	04/18/12		MH	30 - 150 %
% TCMX	84		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	34	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	34	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	17	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.3	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	53	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.3	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	17	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	34	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	34	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	34	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	34	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	34	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.3	ug/Kg	04/18/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	82		%	04/18/12		MR	30 - 150 %
% TCMX	85		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	04/19/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/19/12		R/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/19/12		R/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		R/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Benzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromoform	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Bromomethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloroform	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Chloromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	04/19/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	04/19/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Naphthalene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
o-Xylene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Styrene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Toluene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		R/J	SW8260
Trichloroethene	7.6	5.5	ug/Kg	04/19/12		R/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	04/19/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	04/19/12		R/J	70 - 130 %
% Bromofluorobenzene	87		%	04/19/12		R/J	70 - 130 %
% Dibromofluoromethane	103		%	04/19/12		R/J	70 - 130 %
% Toluene-d8	100		%	04/19/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	570	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-68 3-5 FT

Phoenix I.D.: BB72840

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	570	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	570	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	250	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	570	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	250	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	530	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	250	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	250	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	250	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	250	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-68 3-5 FT

Phoenix I.D.: BB72840

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	250	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	250	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	34		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	54		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	54		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	48		%	04/18/12		DD	15 - 130 %
% Phenol-d5	52		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	71		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	11:09
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72841

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-69 5-7 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	04/18/12		LK	6010
Arsenic	6.30	0.72	mg/Kg	04/18/12		LK	6010
Barium	40.7	0.36	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.36	0.36	mg/Kg	04/18/12		LK	6010
Chromium	15.6	0.36	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	19.2	0.36	mg/Kg	04/18/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	0.029	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	0.027	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	95		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-69 5-7 FT

Phoenix I.D.: BB72841

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	43	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	430	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	43	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	86	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	43	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	86	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	63		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	110		%	04/18/12		MH	30 - 150 %
% TCMX	85		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/18/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	86		%	04/18/12		MR	30 - 150 %
% TCMX	87		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,1,1-Trichloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,1,2,2-Tetrachloroethane	ND	3	ug/Kg	04/19/12		R/P	SW8260
1,1,2-Trichloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,1-Dichloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,1-Dichloroethene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,1-Dichloropropene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2,3-Trichlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2,3-Trichloropropane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2,4-Trichlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2,4-Trimethylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2-Dibromo-3-chloropropane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2-Dichlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2-Dichloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,2-Dichloropropane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,3,5-Trimethylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,3-Dichlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,3-Dichloropropane	ND	5	ug/Kg	04/19/12		R/P	SW8260
1,4-Dichlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
2,2-Dichloropropane	ND	5	ug/Kg	04/19/12		R/P	SW8260
2-Chlorotoluene	ND	5	ug/Kg	04/19/12		R/P	SW8260
2-Hexanone	ND	26	ug/Kg	04/19/12		R/P	SW8260
2-Isopropyltoluene	ND	5	ug/Kg	04/19/12		R/P	SW8260
4-Chlorotoluene	ND	5	ug/Kg	04/19/12		R/P	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	04/19/12		R/P	SW8260
Acetone	ND	104	ug/Kg	04/19/12		R/P	SW8260
Acrylonitrile	ND	5	ug/Kg	04/19/12		R/P	SW8260
Benzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Bromobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Bromochloromethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Bromodichloromethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Bromoform	ND	5	ug/Kg	04/19/12		R/P	SW8260
Bromomethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Carbon Disulfide	ND	5	ug/Kg	04/19/12		R/P	SW8260
Carbon tetrachloride	ND	5	ug/Kg	04/19/12		R/P	SW8260
Chlorobenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Chloroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Chloroform	ND	5	ug/Kg	04/19/12		R/P	SW8260
Chloromethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
cis-1,2-Dichloroethene	ND	5	ug/Kg	04/19/12		R/P	SW8260
cis-1,3-Dichloropropene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Dibromochloromethane	ND	3	ug/Kg	04/19/12		R/P	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Dibromomethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Dichlorodifluoromethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Ethylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Hexachlorobutadiene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Isopropylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
m&p-Xylene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Methyl Ethyl Ketone	ND	31	ug/Kg	04/19/12		R/P	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		R/P	SW8260
Methylene chloride	ND	5	ug/Kg	04/19/12		R/P	SW8260
Naphthalene	ND	5	ug/Kg	04/19/12		R/P	SW8260
n-Butylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
n-Propylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
o-Xylene	ND	5	ug/Kg	04/19/12		R/P	SW8260
p-Isopropyltoluene	ND	5	ug/Kg	04/19/12		R/P	SW8260
sec-Butylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Styrene	ND	5	ug/Kg	04/19/12		R/P	SW8260
tert-Butylbenzene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Tetrachloroethene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		R/P	SW8260
Toluene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Total Xylenes	ND	5	ug/Kg	04/19/12		R/P	SW8260
trans-1,2-Dichloroethene	ND	5	ug/Kg	04/19/12		R/P	SW8260
trans-1,3-Dichloropropene	ND	5	ug/Kg	04/19/12		R/P	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		R/P	SW8260
Trichloroethene	ND	5	ug/Kg	04/19/12		R/P	SW8260
Trichlorofluoromethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Trichlorotrifluoroethane	ND	5	ug/Kg	04/19/12		R/P	SW8260
Vinyl chloride	ND	5	ug/Kg	04/19/12		R/P	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/19/12		R/P	70 - 130 %
% Bromofluorobenzene	98		%	04/19/12		R/P	70 - 130 %
% Dibromofluoromethane	97		%	04/19/12		R/P	70 - 130 %
% Toluene-d8	100		%	04/19/12		R/P	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-69 5-7 FT

Phoenix I.D.: BB72841

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-69 5-7 FT

Phoenix I.D.: BB72841

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	54		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	77		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	71		%	04/18/12		DD	15 - 130 %
% Phenol-d5	75		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	100		%	04/18/12		DD	15 - 130 %

Comments:

8260 Comment:
Sample exhibited severe matrix interference. Both Low-level vials were analyzed with very poor internal standard response. The high level analysis did not exhibit this interference. Had any compounds been detected in the high level analysis, they would have been reported at that dilution. The low level analysis was reported, in order to meet the requested reporting criteria, the surrogate recoveries are from the high level analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 25, 2012
Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	10:41
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72842

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-70 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	04/18/12		LK	6010
Arsenic	7.55	0.69	mg/Kg	04/18/12		LK	6010
Barium	17.1	0.35	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.35	0.35	mg/Kg	04/18/12		LK	6010
Chromium	6.27	0.35	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	6.08	0.35	mg/Kg	04/18/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	95		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-70 3-5 FT

Phoenix I.D.: BB72842

Parameter	Result	RL	Units	Date	Time	By	Reference	
Chlorinated Herbicides								
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151	
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151	
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151	
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151	
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151	
Dicamba	ND	88	ug/Kg	04/18/12		JRB	SW8151	
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151	
Dinoseb	ND	88	ug/Kg	04/18/12		JRB	SW8151	
QA/QC Surrogates								
% DCAA	64		%	04/18/12		JRB	30 - 150 %	
TPH by GC (Extractable Products)								
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015	
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015	
QA/QC Surrogates								
% n-Pentacosane	48		%	04/18/12		JRB	50 - 150 %	3
Polychlorinated Biphenyls								
PCB-1016	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1221	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1232	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1242	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1248	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1254	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1260	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1262	ND	350	ug/Kg	04/18/12		MH	SW 8082	
PCB-1268	ND	350	ug/Kg	04/18/12		MH	SW 8082	
QA/QC Surrogates								
% DCBP	113		%	04/18/12		MH	30 - 150 %	
% TCMX	90		%	04/18/12		MH	30 - 150 %	
Pesticides								
4,4' -DDD	ND	34	ug/Kg	04/18/12		MR	SW8081	
4,4' -DDE	ND	34	ug/Kg	04/18/12		MR	SW8081	
4,4' -DDT	ND	34	ug/Kg	04/18/12		MR	SW8081	
a-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081	
Alachlor	ND	17	ug/Kg	04/18/12		MR	SW8081	
Aldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081	
b-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081	
Chlordane	ND	52	ug/Kg	04/18/12		MR	SW8081	
d-BHC	ND	17	ug/Kg	04/18/12		MR	SW8081	
Dieldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081	
Endosulfan I	ND	17	ug/Kg	04/18/12		MR	SW8081	
Endosulfan II	ND	34	ug/Kg	04/18/12		MR	SW8081	
Endosulfan sulfate	ND	34	ug/Kg	04/18/12		MR	SW8081	
Endrin	ND	34	ug/Kg	04/18/12		MR	SW8081	
Endrin aldehyde	ND	34	ug/Kg	04/18/12		MR	SW8081	
Endrin ketone	ND	34	ug/Kg	04/18/12		MR	SW8081	
g-BHC	ND	5.2	ug/Kg	04/18/12		MR	SW8081	

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	17	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	170	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	170	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	87		%	04/18/12		MR	30 - 150 %
% TCMX	90		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	04/19/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
2-Hexanone	ND	27	ug/Kg	04/19/12		R/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	04/19/12		R/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		R/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Benzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Bromoform	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Bromomethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Chloroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Chloroform	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Chloromethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	04/19/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-70 3-5 FT

Phoenix I.D.: BB72842

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Dibromomethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Ethylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Hexachlorobutadiene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Isopropylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
m&p-Xylene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	04/19/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Methylene chloride	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Naphthalene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
n-Butylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
n-Propylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
o-Xylene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
p-Isopropyltoluene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
sec-Butylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Styrene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
tert-Butylbenzene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Tetrachloroethene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		R/J	SW8260
Toluene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Total Xylenes	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		R/J	SW8260
Trichloroethene	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Trichlorofluoromethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
Vinyl chloride	ND	5.3	ug/Kg	04/19/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	105		%	04/19/12		R/J	70 - 130 %
% Bromofluorobenzene	87		%	04/19/12		R/J	70 - 130 %
% Dibromofluoromethane	100		%	04/19/12		R/J	70 - 130 %
% Toluene-d8	99		%	04/19/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-70 3-5 FT

Phoenix I.D.: BB72842

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-70 3-5 FT

Phoenix I.D.: BB72842

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	51		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	73		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	67		%	04/18/12		DD	15 - 130 %
% Phenol-d5	72		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/18/12		DD	15 - 130 %

3 = This parameter exceeds laboratory specified limits.

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	10:12
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72843

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-71 3-5 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Arsenic	2.69	0.67	mg/Kg	04/18/12		LK	6010
Barium	37.0	0.34	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.34	0.34	mg/Kg	04/18/12		LK	6010
Chromium	11.4	0.34	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	5.93	0.34	mg/Kg	04/18/12		LK	6010
Selenium	< 1.3	1.3	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	0.013	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	95		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-71 3-5 FT

Phoenix I.D.: BB72843

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	68		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	100		%	04/18/12		MH	30 - 150 %
% TCMX	82		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	51	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.1	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.1	ug/Kg	04/18/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	81		%	04/18/12		MR	30 - 150 %
% TCMX	85		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-71 3-5 FT

Phoenix I.D.: BB72843

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	97		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	101		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	97		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	550	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-71 3-5 FT

Phoenix I.D.: BB72843

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	550	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	410	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	340	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-71 3-5 FT

Phoenix I.D.: BB72843

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	340	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	340	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	340	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	50		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	68		%	04/18/12		DD	15 - 130 %
% Phenol-d5	71		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	94		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	9:55
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72844

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-72 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	04/18/12		LK	6010
Arsenic	3.52	0.72	mg/Kg	04/18/12		LK	6010
Barium	28.4	0.36	mg/Kg	04/18/12		LK	6010
Cadmium	< 0.36	0.36	mg/Kg	04/18/12		LK	6010
Chromium	10.8	0.36	mg/Kg	04/18/12		LK	6010
Mercury	< 0.07	0.07	mg/Kg	04/18/12		RS	SW-7471
Lead	7.48	0.36	mg/Kg	04/18/12		LK	6010
Selenium	< 1.4	1.4	mg/Kg	04/18/12		LK	6010
SPLP Silver	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	04/18/12		LK	6010
SPLP Barium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	04/18/12		LK	6010
SPLP Chromium	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	04/18/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	04/18/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	04/18/12		LK	6010
Total Metals Digest	Completed			04/17/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			04/18/12		X/X	SW846-3005
Percent Solid	95		%	04/17/12		JL	E160.3
Soil Extraction for PCB	Completed			04/17/12		RB/F	SW3545
Soil Extraction for Pesticide	Completed			04/17/12		RB	SW3545
Soil Extraction for SVOA	Completed			04/17/12		RB/R	SW3545
Extraction of CT ETPH	Completed			04/17/12		BS/F	3545
Mercury Digestion	Completed			04/18/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			04/16/12		M/D	SW8151
SPLP Digestion Mercury	Completed			04/18/12		X	E1312/SW7470
SPLP Extraction for Metals	Completed			04/17/12		X	EPA 1312
Field Extraction	Completed			04/16/12		CK	SW5035

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-72 2-4 FT

Phoenix I.D.: BB72844

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	04/18/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	04/18/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dicamba	ND	87	ug/Kg	04/18/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	04/18/12		JRB	SW8151
Dinoseb	ND	87	ug/Kg	04/18/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	62		%	04/18/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	10	mg/Kg	04/18/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	04/18/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	73		%	04/18/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1221	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1232	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1242	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1248	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1254	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1260	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1262	ND	340	ug/Kg	04/18/12		MH	SW 8082
PCB-1268	ND	340	ug/Kg	04/18/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	142		%	04/18/12		MH	30 - 150 %
% TCMX	118		%	04/18/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDE	ND	33	ug/Kg	04/18/12		MR	SW8081
4,4' -DDT	ND	33	ug/Kg	04/18/12		MR	SW8081
a-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Alachlor	ND	16	ug/Kg	04/18/12		MR	SW8081
Aldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
b-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Chlordane	ND	52	ug/Kg	04/18/12		MR	SW8081
d-BHC	ND	16	ug/Kg	04/18/12		MR	SW8081
Dieldrin	ND	5.2	ug/Kg	04/18/12		MR	SW8081
Endosulfan I	ND	16	ug/Kg	04/18/12		MR	SW8081
Endosulfan II	ND	33	ug/Kg	04/18/12		MR	SW8081
Endosulfan sulfate	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin aldehyde	ND	33	ug/Kg	04/18/12		MR	SW8081
Endrin ketone	ND	33	ug/Kg	04/18/12		MR	SW8081
g-BHC	ND	5.2	ug/Kg	04/18/12		MR	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	04/18/12		MR	SW8081
Heptachlor epoxide	ND	16	ug/Kg	04/18/12		MR	SW8081
Methoxychlor	ND	160	ug/Kg	04/18/12		MR	SW8081
Toxaphene	ND	160	ug/Kg	04/18/12		MR	SW8081
QA/QC Surrogates							
% DCBP	83		%	04/18/12		MR	30 - 150 %
% TCMX	89		%	04/18/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	110	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-72 2-4 FT

Phoenix I.D.: BB72844

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	96		%	04/19/12		H/J	70 - 130 %
% Dibromofluoromethane	103		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	98		%	04/19/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,2-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,3-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
1,4-Dichlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dichlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dimethylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	04/18/12		DD	SW 8270
2,4-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2,6-Dinitrotoluene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chloronaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Chlorophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Methylnaphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: GP-72 2-4 FT

Phoenix I.D.: BB72844

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	240	ug/Kg	04/18/12		DD	SW 8270
2-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
2-Nitrophenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	04/18/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	240	ug/Kg	04/18/12		DD	SW 8270
3-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chloroaniline	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
4-Nitroaniline	ND	560	ug/Kg	04/18/12		DD	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Acenaphthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acenaphthylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Acetophenone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Aniline	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Azobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Benz(a)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzidine	ND	420	ug/Kg	04/18/12		DD	SW 8270
Benzo(a)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(b)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(ghi)perylene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzo(k)fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Benzoic acid	ND	1000	ug/Kg	04/18/12		DD	SW 8270
Benzyl butyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	04/18/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	240	ug/Kg	04/18/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Carbazole	ND	520	ug/Kg	04/18/12		DD	SW 8270
Chrysene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dibenzofuran	ND	240	ug/Kg	04/18/12		DD	SW 8270
Diethyl phthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Dimethylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-butylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Di-n-octylphthalate	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluoranthene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Fluorene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorobutadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Hexachloroethane	ND	240	ug/Kg	04/18/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Isophorone	ND	240	ug/Kg	04/18/12		DD	SW 8270
Naphthalene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Nitrobenzene	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: GP-72 2-4 FT

Phoenix I.D.: BB72844

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	240	ug/Kg	04/18/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	04/18/12		DD	SW 8270
Pentachlorophenol	ND	350	ug/Kg	04/18/12		DD	SW 8270
Phenanthrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Phenol	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyrene	ND	240	ug/Kg	04/18/12		DD	SW 8270
Pyridine	ND	350	ug/Kg	04/18/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	61		%	04/18/12		DD	15 - 130 %
% 2-Fluorobiphenyl	79		%	04/18/12		DD	15 - 130 %
% 2-Fluorophenol	79		%	04/18/12		DD	15 - 130 %
% Nitrobenzene-d5	78		%	04/18/12		DD	15 - 130 %
% Phenol-d5	80		%	04/18/12		DD	15 - 130 %
% Terphenyl-d14	103		%	04/18/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 25, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/16/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/17/12	13:50
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB72837
Phoenix ID: BB72845

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-5 LOW

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%				E160.3
Field Extraction	Completed			04/16/12		CK	SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,1-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,2-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,3-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2,2-Dichloropropane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2-Chlorotoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
2-Hexanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
2-Isopropyltoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
4-Chlorotoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY
Client ID: TB-5 LOW

Phoenix I.D.: BB72845

Parameter	Result	RL	Units	Date	Time	By	Reference
4-Methyl-2-pentanone	ND	25	ug/Kg	04/19/12		H/J	SW8260
Acetone	ND	100	ug/Kg	04/19/12		H/J	SW8260
Acrylonitrile	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Benzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromochloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromodichloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromoform	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Bromomethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Carbon Disulfide	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Carbon tetrachloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chlorobenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloroform	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Chloromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dibromochloromethane	ND	3.0	ug/Kg	04/19/12		H/J	SW8260
Dibromoethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dibromomethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Ethylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Hexachlorobutadiene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Isopropylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
m&p-Xylene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Methyl Ethyl Ketone	ND	30	ug/Kg	04/19/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Methylene chloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Naphthalene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
n-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
n-Propylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
o-Xylene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
p-Isopropyltoluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
sec-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Styrene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
tert-Butylbenzene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Tetrachloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	10	ug/Kg	04/19/12		H/J	SW8260
Toluene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Total Xylenes	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	04/19/12		H/J	SW8260
Trichloroethene	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Trichlorofluoromethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
Vinyl chloride	ND	5.0	ug/Kg	04/19/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/19/12		H/J	70 - 130 %
% Bromofluorobenzene	98		%	04/19/12		H/J	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY

Client ID: TB-5 LOW

Phoenix I.D.: BB72845

Parameter	Result	RL	Units	Date	Time	By	Reference
% Dibromofluoromethane	99		%	04/19/12		H/J	70 - 130 %
% Toluene-d8	100		%	04/19/12		H/J	70 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 25, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 25, 2012

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 198519, QC Sample No: BB72063 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)												
ICP Metals - SPLP Extraction												
Arsenic	0.004	0.018	0.015	NC	100	100	0.0	106	104	1.9	75 - 125	20
Barium	BDL	0.050	0.052	3.90	97.6	99.1	1.5	103	100	3.0	75 - 125	20
Cadmium	BDL	<0.005	<0.005	NC	101	101	0.0	106	104	1.9	75 - 125	20
Chromium	BDL	0.0068	<0.010	NC	103	103	0.0	108	106	1.9	75 - 125	20
Lead	BDL	0.037	0.038	NC	101	101	0.0	107	105	1.9	75 - 125	20
Selenium	BDL	<0.020	<0.020	NC	102	103	1.0	108	106	1.9	75 - 125	20
Silver	BDL	<0.010	<0.010	NC	92.6	93.7	1.2	99.0	97.8	1.2	75 - 125	20
QA/QC Batch 198594, QC Sample No: BB72837 (BB72837, BB72838, BB72839, BB72840)												
Mercury - Soil	BDL	<0.06	<0.08	NC	103	94.3	8.8	95.7	93.4	2.4	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 198595, QC Sample No: BB72841 (BB72841, BB72842, BB72843, BB72844)												
Mercury - Soil	BDL	<0.07	<0.08	NC	97.4	91.7	6.0	90.8	100	9.6	70 - 130	30
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 198551, QC Sample No: BB72843 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)												
ICP Metals - Soil												
Arsenic	BDL	2.69	2.59	NC	96.9	91.2	6.1	88.6	89.8	1.3	75 - 125	30
Barium	BDL	37.0	37.1	0.30	108	102	5.7	90.5	92.9	2.6	75 - 125	30
Cadmium	BDL	<0.34	<0.37	NC	97.3	93.4	4.1	90.8	91.6	0.9	75 - 125	30
Chromium	BDL	11.4	10.7	6.30	107	99.0	7.8	95.6	96.6	1.0	75 - 125	30
Lead	BDL	5.93	6.31	6.20	104	98.0	5.9	94.5	95.1	0.6	75 - 125	30
Selenium	BDL	<1.3	<1.5	NC	87.0	83.9	3.6	82.5	83.4	1.1	75 - 125	30
Silver	BDL	<0.34	<0.37	NC	102	98.1	3.9	96.2	96.1	0.1	75 - 125	30
QA/QC Batch 198596, QC Sample No: BB72882 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	102	97.1	4.9	94.0	97.6	3.8	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 25, 2012

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198457, QC Sample No: BB72348 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	75	80	6.5	67	76	12.6	40 - 140	30	
2,4,5-TP (Silvex)	ND	86	92	6.7	85	91	6.8	40 - 140	30	
2,4-D	ND	80	85	6.1	64	73	13.1	40 - 140	30	
2,4-DB	ND	65	69	6.0	74	89	18.4	40 - 140	30	
Dalapon	ND	65	73	11.6	50	62	21.4	40 - 140	30	
Dicamba	ND	94	105	11.1	70	79	12.1	40 - 140	30	
Dichloroprop	ND	72	79	9.3	63	78	21.3	40 - 140	30	
Dinoseb	ND	33	36	8.7	17	25	38.1	40 - 140	30	l,m,r
% DCAA (Surrogate Rec)	107	72	77	6.7	69	74	7.0	30 - 150	30	
QA/QC Batch 198447, QC Sample No: BB72348 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)										
Pesticides - Soil										
4,4' -DDD	ND	97			>130	>130	NC	40 - 140	30	m
4,4' -DDE	ND	94			94	95	1.1	40 - 140	30	
4,4' -DDT	ND	94			101	102	1.0	40 - 140	30	
a-BHC	ND	91			79	83	4.9	40 - 140	30	
a-Chlordane	ND	85			77	79	2.6	40 - 140	30	
Alachlor	ND	N/A			N/A	N/A	NC	40 - 140	30	
Aldrin	ND	85			74	76	2.7	40 - 140	30	
b-BHC	ND	84			72	78	8.0	40 - 140	30	
Chlordane	ND	N/A			N/A	N/A	NC	40 - 140	30	
d-BHC	ND	86			75	79	5.2	40 - 140	30	
Dieldrin	ND	88			79	80	1.3	40 - 140	30	
Endosulfan I	ND	83			73	76	4.0	40 - 140	30	
Endosulfan II	ND	76			76	76	0.0	40 - 140	30	
Endosulfan sulfate	ND	73			79	82	3.7	40 - 140	30	
Endrin	ND	84			80	82	2.5	40 - 140	30	
Endrin aldehyde	ND	73			83	86	3.6	40 - 140	30	
Endrin ketone	ND	90			89	89	0.0	40 - 140	30	
g-BHC	ND	88			82	86	4.8	40 - 140	30	
g-Chlordane	ND	86			83	82	1.2	40 - 140	30	
Heptachlor	ND	87			73	78	6.6	40 - 140	30	
Heptachlor epoxide	ND	85			72	73	1.4	40 - 140	30	
Methoxychlor	ND	89			>130	>130	NC	40 - 140	30	m
Toxaphene	ND	N/A			N/A	N/A	NC	40 - 140	30	
% DCBP	80	79			94	94	0.0	30 - 150	30	
% TCMX	88	87			74	79	6.5	30 - 150	30	
QA/QC Batch 198444, QC Sample No: BB72348 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	41	42	2.4	54	55	1.8	30 - 130	30	
1,2,4-Trichlorobenzene	ND	62	61	1.6	84	84	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2-Dichlorobenzene	ND	64	63	1.6	85	79	7.3	30 - 130	30	
1,3-Dichlorobenzene	ND	62	61	1.6	80	79	1.3	30 - 130	30	
1,4-Dichlorobenzene	ND	62	62	0.0	82	80	2.5	30 - 130	30	
2,4,5-Trichlorophenol	ND	69	72	4.3	95	98	3.1	30 - 130	30	
2,4,6-Trichlorophenol	ND	71	73	2.8	101	102	1.0	30 - 130	30	
2,4-Dichlorophenol	ND	65	65	0.0	92	93	1.1	30 - 130	30	
2,4-Dimethylphenol	ND	44	43	2.3	79	83	4.9	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	<5	<5	NC	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	74	73	1.4	92	92	0.0	30 - 130	30	
2,6-Dinitrotoluene	ND	73	72	1.4	91	91	0.0	30 - 130	30	
2-Chloronaphthalene	ND	68	67	1.5	99	98	1.0	30 - 130	30	
2-Chlorophenol	ND	60	58	3.4	89	89	0.0	30 - 130	30	
2-Methylnaphthalene	ND	63	62	1.6	NC	NC	NC	30 - 130	30	
2-Methylphenol (o-cresol)	ND	60	58	3.4	92	69	28.6	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	61	58	5.0	90	91	1.1	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	61	62	1.6	103	100	3.0	30 - 130	30	
3,3'-Dichlorobenzidine	ND	50	47	6.2	63	63	0.0	30 - 130	30	
3-Nitroaniline	ND	>150	>150	NC	100	100	0.0	30 - 130	30	l
4,6-Dinitro-2-methylphenol	ND	35	33	5.9	42	41	2.4	30 - 130	30	
4-Bromophenyl phenyl ether	ND	68	68	0.0	90	92	2.2	30 - 130	30	
4-Chloro-3-methylphenol	ND	68	68	0.0	93	95	2.1	30 - 130	30	
4-Chloroaniline	ND	106	104	1.9	59	60	1.7	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	77	77	0.0	101	101	0.0	30 - 130	30	
4-Nitroaniline	ND	75	73	2.7	100	100	0.0	30 - 130	30	
4-Nitrophenol	ND	73	71	2.8	48	61	23.9	30 - 130	30	
Acenaphthene	ND	68	67	1.5	114	NC	NC	30 - 130	30	
Acenaphthylene	ND	66	66	0.0	NC	NC	NC	30 - 130	30	
Acetophenone	ND	34	33	3.0	51	48	6.1	30 - 130	30	
Aniline	ND	38	37	2.7	38	47	21.2	30 - 130	30	
Anthracene	ND	70	69	1.4	NC	NC	NC	30 - 130	30	
Azobenzene	ND	37	37	0.0	49	48	2.1	30 - 130	30	
Benz(a)anthracene	ND	72	71	1.4	NC	NC	NC	30 - 130	30	
Benzidine	ND	26	20	26.1	<5	<5	NC	30 - 130	30	l,m
Benzo(a)pyrene	ND	69	67	2.9	NC	NC	NC	30 - 130	30	
Benzo(b)fluoranthene	ND	75	74	1.3	NC	NC	NC	30 - 130	30	
Benzo(ghi)perylene	ND	77	76	1.3	NC	NC	NC	30 - 130	30	
Benzo(k)fluoranthene	ND	73	71	2.8	NC	NC	NC	30 - 130	30	
Benzyl butyl phthalate	ND	63	63	0.0	96	97	1.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	63	64	1.6	93	90	3.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	59	58	1.7	69	68	1.5	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	62	62	0.0	91	52	54.5	30 - 130	30	r
Bis(2-ethylhexyl)phthalate	ND	63	64	1.6	109	112	2.7	30 - 130	30	
Carbazole	ND	78	75	3.9	38	38	0.0	30 - 130	30	
Chrysene	ND	70	70	0.0	NC	NC	NC	30 - 130	30	
Dibenz(a,h)anthracene	ND	79	77	2.6	88	82	7.1	30 - 130	30	
Dibenzofuran	ND	70	69	1.4	34	33	3.0	30 - 130	30	
Diethyl phthalate	ND	73	72	1.4	97	97	0.0	30 - 130	30	
Dimethylphthalate	ND	70	71	1.4	96	95	1.0	30 - 130	30	
Di-n-butylphthalate	ND	68	67	1.5	95	94	1.1	30 - 130	30	
Di-n-octylphthalate	ND	63	61	3.2	101	100	1.0	30 - 130	30	
Fluoranthene	ND	76	74	2.7	NC	NC	NC	30 - 130	30	
Fluorene	ND	77	76	1.3	NC	NC	NC	30 - 130	30	

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Hexachlorobenzene	ND	70	68	2.9	93	91	2.2	30 - 130	30	
Hexachlorobutadiene	ND	67	66	1.5	87	87	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	54	55	1.8	<5	<5	NC	30 - 130	30	m
Hexachloroethane	ND	59	59	0.0	79	75	5.2	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	78	76	2.6	NC	NC	NC	30 - 130	30	
Isophorone	ND	62	62	0.0	91	91	0.0	30 - 130	30	
Naphthalene	ND	67	67	0.0	NC	NC	NC	30 - 130	30	
Nitrobenzene	ND	64	63	1.6	80	86	7.2	30 - 130	30	
N-Nitrosodimethylamine	ND	63	60	4.9	72	71	1.4	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	61	62	1.6	99	95	4.1	30 - 130	30	
N-Nitrosodiphenylamine	ND	73	71	2.8	109	109	0.0	30 - 130	30	
Pentachloronitrobenzene	ND	89	89	0.0	98	98	0.0	30 - 130	30	
Pentachlorophenol	ND	52	52	0.0	96	107	10.8	30 - 130	30	
Phenanthrene	ND	71	72	1.4	NC	NC	NC	30 - 130	30	
Phenol	ND	69	68	1.5	90	90	0.0	30 - 130	30	
Pyrene	ND	81	79	2.5	NC	NC	NC	30 - 130	30	
Pyridine	ND	29	28	3.5	36	35	2.8	30 - 130	30	l
% 2,4,6-Tribromophenol	74	78	77	1.3	110	111	0.9	15 - 130	30	m
% 2-Fluorobiphenyl	59	66	67	1.5	90	89	1.1	30 - 130	30	
% 2-Fluorophenol	58	62	60	3.3	88	88	0.0	15 - 130	30	
% Nitrobenzene-d5	57	64	64	0.0	84	87	3.5	30 - 130	30	
% Phenol-d5	60	64	64	0.0	88	87	1.1	15 - 130	30	
% Terphenyl-d14	81	93	90	3.3	108	109	0.9	30 - 130	30	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198546, QC Sample No: BB72837 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	91	98	7.4	97	96	1.0	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	96	105	9.0	103	103	0.0	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	109	90	97	7.5	98	96	2.1	30 - 150	30
% TCMX (Surrogate Rec)	89	75	79	5.2	78	78	0.0	30 - 150	30

QA/QC Batch 198547, QC Sample No: BB72837 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	66	88	28.6	78	94	18.6	50 - 150	30
% n-Pentacosane	105	88	79	10.8	95	83	13.5	50 - 150	30

QA/QC Batch 198845, QC Sample No: BB72841 (BB72841, BB72842)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	104	107	2.8	101	101	0.0	70 - 130	30
1,1,1-Trichloroethane	ND	108	109	0.9	103	103	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	96	95	1.0	98	97	1.0	70 - 130	30
1,1,2-Trichloroethane	ND	104	106	1.9	101	98	3.0	70 - 130	30
1,1-Dichloroethane	ND	104	107	2.8	101	99	2.0	70 - 130	30
1,1-Dichloroethene	ND	106	105	0.9	100	98	2.0	70 - 130	30

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	110	109	0.9	108	106	1.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	106	108	1.9	103	103	0.0	70 - 130	30	
1,2,3-Trichloropropane	ND	100	96	4.1	91	99	8.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	100	100	0.0	106	106	0.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	106	1.9	108	106	1.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	114	108	5.4	91	94	3.2	70 - 130	30	
1,2-Dichlorobenzene	ND	96	99	3.1	101	101	0.0	70 - 130	30	
1,2-Dichloroethane	ND	102	103	1.0	100	98	2.0	70 - 130	30	
1,2-Dichloropropane	ND	102	105	2.9	101	100	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	108	109	0.9	110	109	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	99	99	0.0	107	105	1.9	70 - 130	30	
1,3-Dichloropropane	ND	103	105	1.9	99	98	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	96	97	1.0	105	104	1.0	70 - 130	30	
2,2-Dichloropropane	ND	104	106	1.9	102	101	1.0	70 - 130	30	
2-Chlorotoluene	ND	104	107	2.8	108	105	2.8	70 - 130	30	
2-Hexanone	ND	71	69	2.9	50	49	2.0	70 - 130	30	l,m
2-Isopropyltoluene	ND	104	105	1.0	108	106	1.9	70 - 130	30	
4-Chlorotoluene	ND	100	102	2.0	110	108	1.8	70 - 130	30	
4-Methyl-2-pentanone	ND	96	95	1.0	87	86	1.2	70 - 130	30	
Acetone	ND	84	82	2.4	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	110	107	2.8	99	94	5.2	70 - 130	30	
Benzene	ND	106	107	0.9	103	101	2.0	70 - 130	30	
Bromobenzene	ND	102	105	2.9	104	102	1.9	70 - 130	30	
Bromochloromethane	ND	104	106	1.9	99	100	1.0	70 - 130	30	
Bromodichloromethane	ND	103	105	1.9	100	98	2.0	70 - 130	30	
Bromoform	ND	108	110	1.8	95	95	0.0	70 - 130	30	
Bromomethane	ND	116	115	0.9	66	65	1.5	70 - 130	30	m
Carbon Disulfide	ND	107	107	0.0	98	95	3.1	70 - 130	30	
Carbon tetrachloride	ND	113	109	3.6	102	101	1.0	70 - 130	30	
Chlorobenzene	ND	99	102	3.0	103	101	2.0	70 - 130	30	
Chloroethane	ND	115	116	0.9	<40	<40	NC	70 - 130	30	m
Chloroform	ND	104	106	1.9	102	99	3.0	70 - 130	30	
Chloromethane	ND	123	125	1.6	100	97	3.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	105	107	1.9	101	100	1.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	100	103	3.0	102	101	1.0	70 - 130	30	
Dibromochloromethane	ND	102	106	3.8	98	98	0.0	70 - 130	30	
Dibromoethane	ND	108	108	0.0	102	101	1.0	70 - 130	30	
Dibromomethane	ND	107	108	0.9	102	100	2.0	70 - 130	30	
Dichlorodifluoromethane	ND	>150	144	NC	103	104	1.0	70 - 130	30	l
Ethylbenzene	ND	103	104	1.0	106	105	0.9	70 - 130	30	
Hexachlorobutadiene	ND	101	97	4.0	107	104	2.8	70 - 130	30	
Isopropylbenzene	ND	107	107	0.0	108	107	0.9	70 - 130	30	
m&p-Xylene	ND	103	104	1.0	107	105	1.9	70 - 130	30	
Methyl ethyl ketone	ND	80	79	1.3	47	46	2.2	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	99	100	1.0	100	98	2.0	70 - 130	30	
Methylene chloride	ND	95	96	1.0	91	89	2.2	70 - 130	30	
Naphthalene	ND	114	115	0.9	100	106	5.8	70 - 130	30	
n-Butylbenzene	ND	105	102	2.9	112	109	2.7	70 - 130	30	
n-Propylbenzene	ND	100	101	1.0	111	108	2.7	70 - 130	30	
o-Xylene	ND	103	105	1.9	107	106	0.9	70 - 130	30	
p-Isopropyltoluene	ND	109	109	0.0	111	109	1.8	70 - 130	30	
sec-Butylbenzene	ND	104	104	0.0	111	108	2.7	70 - 130	30	
Styrene	ND	104	105	1.0	108	106	1.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
tert-Butylbenzene	ND	106	107	0.9	109	108	0.9	70 - 130	30	
Tetrachloroethene	ND	105	103	1.9	105	105	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	110	105	4.7	95	90	5.4	70 - 130	30	
Toluene	ND	106	106	0.0	105	103	1.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	106	106	0.0	102	101	1.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	102	105	2.9	103	102	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	105	111	5.6	102	97	5.0	70 - 130	30	
Trichloroethene	ND	112	112	0.0	102	101	1.0	70 - 130	30	
Trichlorofluoromethane	ND	134	132	1.5	<40	<40	NC	70 - 130	30	l,m
Trichlorotrifluoroethane	ND	107	103	3.8	100	97	3.0	70 - 130	30	
Vinyl chloride	ND	123	124	0.8	100	99	1.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	102	100	101	1.0	98	100	2.0	70 - 130	30	
% Bromofluorobenzene	96	101	100	1.0	102	102	0.0	70 - 130	30	
% Dibromofluoromethane	100	105	103	1.9	98	96	2.1	70 - 130	30	
% Toluene-d8	99	100	100	0.0	102	100	2.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198752, QC Sample No: BB72842 (BB72837, BB72838, BB72839, BB72840, BB72842)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	103	95	8.1	95	95	0.0	70 - 130	30	
1,1,1-Trichloroethane	ND	102	100	2.0	99	100	1.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	96	91	5.3	98	96	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	100	95	5.1	90	91	1.1	70 - 130	30	
1,1-Dichloroethane	ND	101	98	3.0	97	98	1.0	70 - 130	30	
1,1-Dichloroethene	ND	97	94	3.1	97	101	4.0	70 - 130	30	
1,1-Dichloropropene	ND	105	102	2.9	98	99	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	107	100	6.8	43	49	13.0	70 - 130	30	m
1,2,3-Trichloropropane	ND	94	90	4.3	91	89	2.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	106	95	10.9	43	46	6.7	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	108	100	7.7	92	91	1.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	100	98	2.0	81	81	0.0	70 - 130	30	
1,2-Dichlorobenzene	ND	100	92	8.3	70	73	4.2	70 - 130	30	
1,2-Dichloroethane	ND	98	93	5.2	91	91	0.0	70 - 130	30	
1,2-Dichloropropane	ND	99	94	5.2	93	94	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	111	103	7.5	99	98	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	103	95	8.1	72	74	2.7	70 - 130	30	
1,3-Dichloropropane	ND	101	96	5.1	90	89	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	101	92	9.3	67	69	2.9	70 - 130	30	m
2,2-Dichloropropane	ND	105	101	3.9	96	97	1.0	70 - 130	30	
2-Chlorotoluene	ND	107	99	7.8	92	93	1.1	70 - 130	30	
2-Hexanone	ND	63	65	3.1	46	45	2.2	70 - 130	30	l,m
2-Isopropyltoluene	ND	105	98	6.9	98	97	1.0	70 - 130	30	
4-Chlorotoluene	ND	103	94	9.1	81	84	3.6	70 - 130	30	
4-Methyl-2-pentanone	ND	85	85	0.0	86	84	2.4	70 - 130	30	
Acetone	ND	80	86	7.2	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	94	97	3.1	88	88	0.0	70 - 130	30	
Benzene	ND	102	97	5.0	95	96	1.0	70 - 130	30	
Bromobenzene	ND	107	99	7.8	80	82	2.5	70 - 130	30	
Bromochloromethane	ND	103	99	4.0	92	91	1.1	70 - 130	30	
Bromodichloromethane	ND	100	95	5.1	91	92	1.1	70 - 130	30	
Bromoform	ND	100	96	4.1	87	88	1.1	70 - 130	30	
Bromomethane	ND	106	101	4.8	102	104	1.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Carbon Disulfide	ND	99	97	2.0	95	97	2.1	70 - 130	30	
Carbon tetrachloride	ND	103	100	3.0	101	101	0.0	70 - 130	30	
Chlorobenzene	ND	99	94	5.2	83	84	1.2	70 - 130	30	
Chloroethane	ND	106	103	2.9	101	104	2.9	70 - 130	30	
Chloroform	ND	101	97	4.0	94	94	0.0	70 - 130	30	
Chloromethane	ND	113	110	2.7	103	106	2.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	102	98	4.0	90	91	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	101	96	5.1	81	84	3.6	70 - 130	30	
Dibromochloromethane	ND	102	96	6.1	90	89	1.1	70 - 130	30	
Dibromoethane	ND	100	95	5.1	81	84	3.6	70 - 130	30	
Dibromomethane	ND	101	97	4.0	89	90	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	137	135	1.5	116	122	5.0	70 - 130	30	l
Ethylbenzene	ND	102	97	5.0	92	91	1.1	70 - 130	30	
Hexachlorobutadiene	ND	101	92	9.3	82	84	2.4	70 - 130	30	
Isopropylbenzene	ND	108	99	8.7	104	104	0.0	70 - 130	30	
m&p-Xylene	ND	103	97	6.0	91	90	1.1	70 - 130	30	
Methyl ethyl ketone	ND	72	80	10.5	46	43	6.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	98	93	5.2	96	96	0.0	70 - 130	30	
Methylene chloride	ND	91	87	4.5	87	86	1.2	70 - 130	30	
Naphthalene	ND	109	105	3.7	45	52	14.4	70 - 130	30	m
n-Butylbenzene	ND	106	98	7.8	83	82	1.2	70 - 130	30	
n-Propylbenzene	ND	101	94	7.2	95	96	1.0	70 - 130	30	
o-Xylene	ND	102	96	6.1	93	92	1.1	70 - 130	30	
p-Isopropyltoluene	ND	111	104	6.5	96	95	1.0	70 - 130	30	
sec-Butylbenzene	ND	104	97	7.0	100	99	1.0	70 - 130	30	
Styrene	ND	103	97	6.0	80	81	1.2	70 - 130	30	
tert-Butylbenzene	ND	106	100	5.8	106	105	0.9	70 - 130	30	
Tetrachloroethene	ND	105	98	6.9	97	96	1.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	93	97	4.2	92	91	1.1	70 - 130	30	
Toluene	ND	102	97	5.0	91	94	3.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	100	98	2.0	93	95	2.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	102	95	7.1	77	78	1.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	110	103	6.6	76	77	1.3	70 - 130	30	
Trichloroethene	ND	102	98	4.0	91	93	2.2	70 - 130	30	
Trichlorofluoromethane	ND	122	121	0.8	102	105	2.9	70 - 130	30	
Trichlorotrifluoroethane	ND	96	95	1.0	102	104	1.9	70 - 130	30	
Vinyl chloride	ND	112	110	1.8	104	108	3.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	100	99	1.0	102	100	2.0	70 - 130	30	
% Bromofluorobenzene	97	100	100	0.0	98	97	1.0	70 - 130	30	
% Dibromofluoromethane	99	98	101	3.0	104	102	1.9	70 - 130	30	
% Toluene-d8	99	99	99	0.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198838, QC Sample No: BB73149 (BB72843, BB72844)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	95	103	8.1	89	91	2.2	70 - 130	30	
1,1,1-Trichloroethane	ND	89	120	29.7	111	115	3.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	91	96	5.3	106	96	9.9	70 - 130	30	
1,1,2-Trichloroethane	ND	92	101	9.3	88	89	1.1	70 - 130	30	
1,1-Dichloroethane	ND	86	117	30.5	85	110	25.6	70 - 130	30	
1,1-Dichloroethene	ND	102	106	3.8	104	104	0.0	70 - 130	30	
1,1-Dichloropropene	ND	102	113	10.2	103	104	1.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2,3-Trichlorobenzene	ND	100	106	5.8	87	89	2.3	70 - 130	30	
1,2,3-Trichloropropane	ND	102	103	1.0	96	84	13.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	95	104	9.0	89	92	3.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	99	106	6.8	43	43	0.0	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	103	108	4.7	95	87	8.8	70 - 130	30	
1,2-Dichlorobenzene	ND	90	100	10.5	62	59	5.0	70 - 130	30	m
1,2-Dichloroethane	ND	93	100	7.3	89	90	1.1	70 - 130	30	
1,2-Dichloropropane	ND	94	102	8.2	90	92	2.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	103	109	5.7	79	74	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	93	102	9.2	93	94	1.1	70 - 130	30	
1,3-Dichloropropane	ND	93	100	7.3	87	88	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	91	101	10.4	92	94	2.2	70 - 130	30	
2,2-Dichloropropane	ND	89	125	33.6	89	119	28.8	70 - 130	30	r
2-Chlorotoluene	ND	97	103	6.0	74	70	5.6	70 - 130	30	
2-Hexanone	ND	95	91	4.3	59	55	7.0	70 - 130	30	m
2-Isopropyltoluene	ND	97	107	9.8	69	67	2.9	70 - 130	30	m
4-Chlorotoluene	ND	94	101	7.2	79	77	2.6	70 - 130	30	
4-Methyl-2-pentanone	ND	96	98	2.1	91	86	5.6	70 - 130	30	
Acetone	ND	104	95	9.0	56	55	1.8	70 - 130	30	m
Acrylonitrile	ND	92	105	13.2	84	90	6.9	70 - 130	30	
Benzene	ND	97	105	7.9	83	86	3.6	70 - 130	30	
Bromobenzene	ND	94	102	8.2	79	76	3.9	70 - 130	30	
Bromochloromethane	ND	83	109	27.1	83	102	20.5	70 - 130	30	
Bromodichloromethane	ND	95	104	9.0	90	94	4.3	70 - 130	30	
Bromoform	ND	93	103	10.2	84	87	3.5	70 - 130	30	
Bromomethane	ND	97	114	16.1	96	109	12.7	70 - 130	30	
Carbon Disulfide	ND	98	107	8.8	99	101	2.0	70 - 130	30	
Carbon tetrachloride	ND	90	124	31.8	103	113	9.3	70 - 130	30	r
Chlorobenzene	ND	93	102	9.2	85	88	3.5	70 - 130	30	
Chloroethane	ND	93	115	21.2	72	112	43.5	70 - 130	30	r
Chloroform	ND	86	117	30.5	83	109	27.1	70 - 130	30	
Chloromethane	ND	105	112	6.5	103	105	1.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	113	26.0	84	105	22.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	93	102	9.2	90	91	1.1	70 - 130	30	
Dibromochloromethane	ND	95	102	7.1	88	90	2.2	70 - 130	30	
Dibromoethane	ND	93	101	8.2	89	88	1.1	70 - 130	30	
Dibromomethane	ND	93	100	7.3	89	87	2.3	70 - 130	30	
Dichlorodifluoromethane	ND	104	125	18.3	111	132	17.3	70 - 130	30	m
Ethylbenzene	ND	98	107	8.8	80	79	1.3	70 - 130	30	
Hexachlorobutadiene	ND	102	111	8.5	92	94	2.2	70 - 130	30	
Isopropylbenzene	ND	100	107	6.8	80	72	10.5	70 - 130	30	
m&p-Xylene	ND	96	106	9.9	62	63	1.6	70 - 130	30	m
Methyl ethyl ketone	ND	92	97	5.3	60	59	1.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	89	95	6.5	90	91	1.1	70 - 130	30	
Methylene chloride	ND	89	97	8.6	88	92	4.4	70 - 130	30	
Naphthalene	ND	103	105	1.9	<40	<40	NC	70 - 130	30	m
n-Butylbenzene	ND	104	117	11.8	85	78	8.6	70 - 130	30	
n-Propylbenzene	ND	97	105	7.9	85	79	7.3	70 - 130	30	
o-Xylene	ND	93	104	11.2	71	71	0.0	70 - 130	30	
p-Isopropyltoluene	ND	105	116	10.0	87	85	2.3	70 - 130	30	
sec-Butylbenzene	ND	100	110	9.5	86	79	8.5	70 - 130	30	
Styrene	ND	92	102	10.3	61	65	6.3	70 - 130	30	m
tert-Butylbenzene	ND	98	108	9.7	85	78	8.6	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Tetrachloroethene	ND	102	110	7.5	99	100	1.0	70 - 130	30
Tetrahydrofuran (THF)	ND	86	108	22.7	93	92	1.1	70 - 130	30
Toluene	ND	98	107	8.8	81	85	4.8	70 - 130	30
trans-1,2-Dichloroethene	ND	98	106	7.8	99	102	3.0	70 - 130	30
trans-1,3-Dichloropropene	ND	95	103	8.1	90	92	2.2	70 - 130	30
trans-1,4-dichloro-2-butene	ND	99	102	3.0	88	79	10.8	70 - 130	30
Trichloroethene	ND	101	109	7.6	88	90	2.2	70 - 130	30
Trichlorofluoromethane	ND	119	129	8.1	106	108	1.9	70 - 130	30
Trichlorotrifluoroethane	ND	103	114	10.1	108	110	1.8	70 - 130	30
Vinyl chloride	ND	99	117	16.7	99	111	11.4	70 - 130	30
% 1,2-dichlorobenzene-d4	99	101	100	1.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	98	98	101	3.0	99	105	5.9	70 - 130	30
% Dibromofluoromethane	97	94	101	7.2	103	105	1.9	70 - 130	30
% Toluene-d8	99	98	100	2.0	99	101	2.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198839, QC Sample No: BB73737 (BB72845)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	89	99	10.6				70 - 130	30
1,1,1-Trichloroethane	ND	94	121	25.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	89	97	8.6				70 - 130	30
1,1,2-Trichloroethane	ND	94	100	6.2				70 - 130	30
1,1-Dichloroethane	ND	89	116	26.3				70 - 130	30
1,1-Dichloroethene	ND	102	109	6.6				70 - 130	30
1,1-Dichloropropene	ND	103	116	11.9				70 - 130	30
1,2,3-Trichlorobenzene	ND	92	98	6.3				70 - 130	30
1,2,3-Trichloropropane	ND	100	103	3.0				70 - 130	30
1,2,4-Trichlorobenzene	ND	85	92	7.9				70 - 130	30
1,2,4-Trimethylbenzene	ND	95	102	7.1				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	101	114	12.1				70 - 130	30
1,2-Dichlorobenzene	ND	86	96	11.0				70 - 130	30
1,2-Dichloroethane	ND	94	101	7.2				70 - 130	30
1,2-Dichloropropane	ND	94	100	6.2				70 - 130	30
1,3,5-Trimethylbenzene	ND	99	107	7.8				70 - 130	30
1,3-Dichlorobenzene	ND	88	97	9.7				70 - 130	30
1,3-Dichloropropane	ND	93	99	6.3				70 - 130	30
1,4-Dichlorobenzene	ND	85	93	9.0				70 - 130	30
2,2-Dichloropropane	ND	89	119	28.8				70 - 130	30
2-Chlorotoluene	ND	93	101	8.2				70 - 130	30
2-Hexanone	ND	93	95	2.1				70 - 130	30
2-Isopropyltoluene	ND	94	104	10.1				70 - 130	30
4-Chlorotoluene	ND	88	96	8.7				70 - 130	30
4-Methyl-2-pentanone	ND	97	99	2.0				70 - 130	30
Acetone	ND	98	103	5.0				70 - 130	30
Acrylonitrile	ND	91	111	19.8				70 - 130	30
Benzene	ND	97	105	7.9				70 - 130	30
Bromobenzene	ND	91	100	9.4				70 - 130	30
Bromochloromethane	ND	87	112	25.1				70 - 130	30
Bromodichloromethane	ND	92	100	8.3				70 - 130	30
Bromoform	ND	87	98	11.9				70 - 130	30
Bromomethane	ND	98	114	15.1				70 - 130	30
Carbon Disulfide	ND	98	105	6.9				70 - 130	30

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Carbon tetrachloride	ND	87	123	34.3				70 - 130	30	r
Chlorobenzene	ND	89	101	12.6				70 - 130	30	
Chloroethane	ND	97	117	18.7				70 - 130	30	
Chloroform	ND	88	117	28.3				70 - 130	30	
Chloromethane	ND	104	112	7.4				70 - 130	30	
cis-1,2-Dichloroethene	ND	88	113	24.9				70 - 130	30	
cis-1,3-Dichloropropene	ND	92	98	6.3				70 - 130	30	
Dibromochloromethane	ND	88	98	10.8				70 - 130	30	
Dibromoethane	ND	93	102	9.2				70 - 130	30	
Dibromomethane	ND	94	101	7.2				70 - 130	30	
Dichlorodifluoromethane	ND	98	125	24.2				70 - 130	30	
Ethylbenzene	ND	93	106	13.1				70 - 130	30	
Hexachlorobutadiene	ND	95	103	8.1				70 - 130	30	
Isopropylbenzene	ND	97	107	9.8				70 - 130	30	
m&p-Xylene	ND	92	104	12.2				70 - 130	30	
Methyl ethyl ketone	ND	97	106	8.9				70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	92	95	3.2				70 - 130	30	
Methylene chloride	ND	92	96	4.3				70 - 130	30	
Naphthalene	ND	101	107	5.8				70 - 130	30	
n-Butylbenzene	ND	99	108	8.7				70 - 130	30	
n-Propylbenzene	ND	91	103	12.4				70 - 130	30	
o-Xylene	ND	89	100	11.6				70 - 130	30	
p-Isopropyltoluene	ND	100	111	10.4				70 - 130	30	
sec-Butylbenzene	ND	96	108	11.8				70 - 130	30	
Styrene	ND	88	99	11.8				70 - 130	30	
tert-Butylbenzene	ND	96	107	10.8				70 - 130	30	
Tetrachloroethene	ND	97	105	7.9				70 - 130	30	
Tetrahydrofuran (THF)	ND	89	110	21.1				70 - 130	30	
Toluene	ND	97	105	7.9				70 - 130	30	
trans-1,2-Dichloroethene	ND	101	106	4.8				70 - 130	30	
trans-1,3-Dichloropropene	ND	91	99	8.4				70 - 130	30	
trans-1,4-dichloro-2-butene	ND	90	100	10.5				70 - 130	30	
Trichloroethene	ND	100	108	7.7				70 - 130	30	
Trichlorofluoromethane	ND	125	133	6.2				70 - 130	30	l
Trichlorotrifluoroethane	ND	106	115	8.1				70 - 130	30	
Vinyl chloride	ND	102	118	14.5				70 - 130	30	
% 1,2-dichlorobenzene-d4	100	102	103	1.0				70 - 130	30	
% Bromofluorobenzene	100	99	101	2.0				70 - 130	30	
% Dibromofluoromethane	99	103	102	1.0				70 - 130	30	
% Toluene-d8	99	101	101	0.0				70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 25, 2012

QA/QC Data

SDG I.D.: GBB72837

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB72837

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB72837	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB72837	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	10.7	0.67	10	10	mg/Kg
BB72838	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB72839	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB72840	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB72841	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB72842	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB72843	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	340	140	140	ug/Kg
BB72844	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844, BB72845, BB72846

Sampling Date(s): 4/16/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: Herbicide Narration, ICP Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Wednesday, April 25, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine reporting levels do not meet GBPM criteria.

Not all constituents met requested criteria due to matrix and/or the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 04/18/12-1 (BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/18/2012

Instrument: Au-fid84 04/20/12-1 (BB72838)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/20/2012

Instrument: Au-xl1 04/18/12-1 (BB72837)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

QC (Site Specific)

---------- Sample No: BB72837, QA/QC Batch: 198547 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198457 (Samples: BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844): -----

The LCS and/or LCSD recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Dinoseb)

Instrument: Au-ecd14 04/18/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

Initial Calibration ECD14-041812
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/18/2012

QC (Batch Specific)

---------- Sample No: BB72348, QA/QC Batch: 198457 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: Dinoseb(33%)

All LCSD recoveries were within 40 - 140 with the following exceptions: Dinoseb(36%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/18/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

QC (Site Specific)

---------- Sample No: BB72837, QA/QC Batch: 198594 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB72841, QA/QC Batch: 198595 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB72882, QA/QC Batch: 198596 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198519 (Samples: BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844): -----

A trace amount of an analyte was found in blank but were not reported in the sample(s), therefore no bias is suspected. (SPLP Extraction-Arsenic)

Instrument: Icp9 04/17/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/17/2012

Instrument: Icp9 04/18/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/18/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

QC (Site Specific)

---------- Sample No: BB72843, QA/QC Batch: 198551 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB72063, QA/QC Batch: 198519 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd1 04/19/12-1 (BB72837)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/19/2012

Instrument: Au-ecd8 04/18/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/18/2012

Instrument: Au-ecd8 04/23/12-1 (BB72837)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/23/2012

QC (Site Specific)

---------- Sample No: BB72837, QA/QC Batch: 198546 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 40 - 140 with the following exceptions: None.

All MSD recoveries were within 40 - 140 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd13 04/18/12-1 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 15% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds:None

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

Printed Name Mark Rochette
Position: Chemist
Date: 4/18/2012

QC (Batch Specific)

---------- Sample No: BB72348, QA/QC Batch: 198447 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198444 (Samples: BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844): -----

The LCS and/or LCSD recoveries for one or more analytes is belowmethod criteria. A low bias for these analytes is likely. (2,4-Dimethylphenol)

The LCS and/or LCSD recoveries for one or more analytes is below range. A low bias for these analytes is possible. (Benzidine, Pyridine)

The LCS and/or LCSD recoveries for one or more analytes are above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline)

Instrument: Chem12 04/17/12-2 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0417):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, 2,4-dinitrophenol, Pentachlorophenol, Carbazole

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene, % 2,4,6-tribromophenol

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: 4-Nitrophenol, Carbazole

Printed Name Damien Drobinski
Position: Chemist
Date: 4/17/2012

QC Comments: QC Batch 98444 04/16/12 (BB72837, BB72838, BB72839, BB72840, BB72841, BB72842, BB72843, BB72844)

NC - no criteria, spike recovery could not be determined due to amount of this compound in the un-spiked sample.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

QC (Batch Specific)

---------- Sample No: BB72348, QA/QC Batch: 198444 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Benzidine(26%), Pyridine(29%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Benzidine(20%), Pyridine(28%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198752 (Samples: BB72837, BB72838, BB72839, BB72840, BB72842): -----

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene, Acetone, Methyl ethyl ketone, Naphthalene)

The LCS and/or LCSD recoveries for one or more analytes is below range. A low bias for these analytes is possible. (2-Hexanone)

The LCS and/or LCSD recoveries for one or more analytes are above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Dichlorodifluoromethane)

QC Batch 198838 (Samples: BB72843, BB72844): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (1,1-Dichloroethane, 2,2-Dichloropropane, Carbon tetrachloride, Chloroform)

QC Batch 198839 (Samples: BB72845): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Carbon tetrachloride)

The LCS and /or LCSD recoveries for one or more analytes are above range. These compounds were not detected. No bias is suspected. (Trichlorofluoromethane)

QC Batch 198845 (Samples: BB72841, BB72842): -----

The LCS and /or LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2-Hexanone)

The LCS/LCSD recovery is acceptable. One or more analytes in the site specific matrix spike recovery is below the lower range, therefore a slight low bias is possible. (Acetone, Bromomethane, Chloroethane, Methyl ethyl ketone)

The LCS and /or LCSD recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Dichlorodifluoromethane,Trichlorofluoromethane)

Instrument: Chem03 04/18/12-1 (BB72837, BB72838, BB72839, BB72840)

Initial Calibration Verification (RCPS_0406):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Acrolein, Acetone,

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Acrolein, Tetrahydrofuran (THF) None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

Printed Name Johanna Harrington
Position: Chemist
Date: 4/18/2012

Instrument: Chem03 04/19/12-1 (BB72841, BB72842)

Initial Calibration Verification (RCPS_0406):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Acrolein, Acetone,

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: Acrolein, Tetrahydrofuran (THF)

Printed Name Johanna Harrington
Position: Chemist
Date: 4/19/2012

Instrument: Chem11 04/18/12-2 (BB72843, BB72844, BB72845)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Dichlorodifluoromethane

Printed Name Johanna Harrington
Position: Chemist
Date: 4/18/2012

Instrument: Chem11 04/18/12-3 (BB72843, BB72844, BB72845)

Initial Calibration Verification (CHEM11/RCPS_0418):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromomethane

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: None.

Printed Name Peter LaBarre
Position: Chemist
Date: 4/18/2012

QC Comments: QC Batch 98839 04/20/12 (BB72845)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

The MS/MSD are not reported for this batch.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

QC (Site Specific)

---------- Sample No: BB72841, QA/QC Batch: 198845 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Dichlorodifluoromethane(>150%), Trichlorofluoromethane(134%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(69%), Dichlorodifluoromethane(144%), Trichlorofluoromethane(132%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(50%), Acetone(<40%), Bromomethane(66%), Chloroethane(<40%), Methyl ethyl ketone(47%), Trichlorofluoromethane(<40%)

All MSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(49%), Acetone(<40%), Bromomethane(65%), Chloroethane(<40%), Methyl ethyl ketone(46%), Trichlorofluoromethane(<40%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB72842, QA/QC Batch: 198752 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(63%), Dichlorodifluoromethane(137%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(65%), Dichlorodifluoromethane(135%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(43%), 1,2,4-Trichlorobenzene(43%), 1,4-Dichlorobenzene(67%), 2-Hexanone(46%), Acetone(<40%), Methyl ethyl ketone(46%), Naphthalene(45%)

All MSD recoveries were within 70 - 130 with the following exceptions: 1,2,3-Trichlorobenzene(49%), 1,2,4-Trichlorobenzene(46%), 1,4-Dichlorobenzene(69%), 2-Hexanone(45%), Acetone(<40%), Methyl ethyl ketone(43%), Naphthalene(52%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB73149, QA/QC Batch: 198838 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: 2,2-Dichloropropane(33.6%), Carbon tetrachloride(31.8%)

---------- Sample No: BB73737, QA/QC Batch: 198839 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 25, 2012

SDG I.D.: GBB72837

All LCSD recoveries were within 70 - 130 with the following exceptions: Trichlorofluoromethane(133%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Carbon tetrachloride(34.3%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 0 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill CT 06067

Project: Metro North Railroad Catenary
Report to: Jane Witherell
Invoice to: CTDOT - DAS Contract c/o MGI

Project P.O:
Phone #: 8602249141
Fax #: 8602249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-16-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs - 8260	SVOCs 8270	CT ETPH	Pest + PCBs 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	SPLP RCRA 8 Metals					Soil VOA Vials [1] methanol [2] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
72837	GP-65 3-5'	S	4-16-12	1:21pm	X	X	X	X	X	X	X					3	2								
72838	GP-66 3-5'	↓	↓	1:00pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72839	GP-67 3-5'	↓	↓	12:24pm	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72840	GP-68 3-5'	↓	↓	11:57am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72841	GP-69 5-7'	↓	↓	11:09am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72842	GP-70 3-5'	↓	↓	10:41am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72843	GP-71 3-5'	↓	↓	10:12am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72844	GP-72 2-4'	↓	↓	9:55am	↓	↓	↓	↓	↓	↓	↓					↓	↓								
72845	TB-5 - LOW	↓	↓	-	↓											2									
* 72846	~~TB - High~~																								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/17/12	9:55
[signature]	Paradise	4/17/12	1350

Comments, Special Requirements or Regulations:

* Did not receive High TB

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Wednesday, April 18, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Sample ID#s: BB70278 - BB70283

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	6:41
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70278

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP60 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/12/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/12/12		EK	6010
Barium	< 0.002	0.002	mg/L	04/12/12		EK	6010
Cadmium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Chromium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/12/12		LK	6010
Barium (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/12/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.004	0.002	mg/L	04/12/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/12/12		EK	6010
Dissolved Metals Preparation	Completed			04/11/12		AG	SW846-3005
Total Metals Digestion	Completed			04/11/12		AG	
Extraction of CT ETPH	Completed			04/11/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/12/12		X/X	SW7470
Mercury Digestion	Completed			04/12/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/12/12		D/D	SW8151
PCB Extraction	Completed			04/11/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/11/12		T	SW3510
Semi-Volatile Extraction	Completed			04/11/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/13/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/13/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/13/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/13/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	04/13/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	63		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/13/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	75		%	04/13/12		MH	30 - 150 %
% TCMX	67		%	04/13/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP60 GW

Phoenix I.D.: BB70278

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	68		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/16/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/16/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/16/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/16/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/16/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/16/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/16/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/16/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/16/12		R/T	SW8260
Acetone	ND	25	ug/L	04/16/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/16/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/16/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/16/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/16/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/16/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/16/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/16/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/16/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/16/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/16/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/16/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/16/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/16/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/16/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/16/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/16/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/16/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/16/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/16/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/16/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/16/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/16/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/16/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/16/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/16/12		R/T	SW8260
Trichloroethene	2.3	1.0	ug/L	04/16/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/16/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/16/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/16/12		R/T	70 - 130 %
% Bromofluorobenzene	85		%	04/16/12		R/T	70 - 130 %
% Dibromofluoromethane	101		%	04/16/12		R/T	70 - 130 %
% Toluene-d8	98		%	04/16/12		R/T	70 - 130 %

Semivolatiles

1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/12/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/12/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/12/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP60 GW

Phoenix I.D.: BB70278

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/12/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/12/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/12/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/12/12		DD	SW8270
Aniline	ND	10	ug/L	04/12/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/12/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
Benzidine	ND	50	ug/L	04/12/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/12/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/12/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/12/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/12/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
Phenol	ND	10	ug/L	04/12/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/12/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/12/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	111		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	68		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/12/12		DD	15 - 130 %
% Phenol-d5	69		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/12/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/12/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP60 GW

Phoenix I.D.: BB70278

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/12/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/12/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	111		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	68		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	67		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	77		%	04/12/12		DD	15 - 130 %
% Phenol-d5	69		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/12/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	9:24
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70279

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP62 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/12/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/12/12		EK	6010
Barium	0.012	0.002	mg/L	04/12/12		EK	6010
Cadmium	0.002	0.001	mg/L	04/16/12		EK	6010
Chromium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/12/12		LK	6010
Barium (Dissolved)	0.011	0.002	mg/L	04/12/12		LK	6010
Cadmium (Dissolved)	0.002	0.001	mg/L	04/12/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/12/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/12/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/12/12		EK	6010
Dissolved Metals Preparation	Completed			04/11/12		AG	SW846-3005
Total Metals Digestion	Completed			04/11/12		AG	
Extraction of CT ETPH	Completed			04/11/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/12/12		X/X	SW7470
Mercury Digestion	Completed			04/12/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/12/12		D/D	SW8151
PCB Extraction	Completed			04/11/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/11/12		T	SW3510
Semi-Volatile Extraction	Completed			04/11/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.2	ug/L	04/13/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.2	ug/L	04/13/12		JRB	SW8151
2,4-D	ND	1.2	ug/L	04/13/12		JRB	SW8151
2,4-DB	ND	12	ug/L	04/13/12		JRB	SW8151
Dalapon	ND	1.2	ug/L	04/13/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/13/12		JRB	SW8151
Dichloroprop	ND	1.2	ug/L	04/13/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/13/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	72		%	04/13/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	64		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/13/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	74		%	04/13/12		MH	30 - 150 %
% TCMX	67		%	04/13/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP62 GW

Phoenix I.D.: BB70279

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	92		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	75		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/13/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Acetone	ND	25	ug/L	04/13/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/13/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/13/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/13/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chlorobenzene	2.7	1.0	ug/L	04/13/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,2-Dichloroethene	1.5	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/13/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/13/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Tetrachloroethene	1.3	1.0	ug/L	04/13/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/13/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/13/12		R/T	SW8260
Trichloroethene	62	5.0	ug/L	04/13/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/13/12		R/T	70 - 130 %
% Bromofluorobenzene	87		%	04/13/12		R/T	70 - 130 %
% Dibromofluoromethane	101		%	04/13/12		R/T	70 - 130 %
% Toluene-d8	94		%	04/13/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/12/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/12/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/12/12		DD	SW8270

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/12/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/12/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/12/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/12/12		DD	SW8270
Aniline	ND	10	ug/L	04/12/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/12/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
Benzidine	ND	50	ug/L	04/12/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/12/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/12/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/12/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/12/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
Phenol	ND	10	ug/L	04/12/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/12/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/12/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/12/12		DD	15 - 130 %
% Phenol-d5	73		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	98		%	04/12/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/12/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP62 GW

Phoenix I.D.: BB70279

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/12/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/12/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	71		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	72		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/12/12		DD	15 - 130 %
% Phenol-d5	73		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	98		%	04/12/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	11:04
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70280

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP64 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/12/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/12/12		EK	6010
Barium	0.007	0.002	mg/L	04/12/12		EK	6010
Cadmium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Chromium	0.007	0.001	mg/L	04/12/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/12/12		LK	6010
Barium (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/12/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.008	0.002	mg/L	04/12/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/12/12		EK	6010
Dissolved Metals Preparation	Completed			04/11/12		AG	SW846-3005
Total Metals Digestion	Completed			04/11/12		AG	
Extraction of CT ETPH	Completed			04/11/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/12/12		X/X	SW7470
Mercury Digestion	Completed			04/12/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/12/12		D/D	SW8151
PCB Extraction	Completed			04/11/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/11/12		T	SW3510
Semi-Volatile Extraction	Completed			04/11/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/13/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/13/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/13/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/13/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	79		%	04/13/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	85		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/13/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	67		%	04/13/12		MH	30 - 150 %
% TCMX	65		%	04/13/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP64 GW

Phoenix I.D.: BB70280

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	79		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	66		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/14/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Acetone	ND	25	ug/L	04/14/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/14/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/14/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/14/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/14/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/14/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/14/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/14/12		R/T	SW8260
Trichloroethene	3.2	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/14/12		R/T	70 - 130 %
% Bromofluorobenzene	86		%	04/14/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	04/14/12		R/T	70 - 130 %
% Toluene-d8	95		%	04/14/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/12/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/12/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/12/12		DD	SW8270

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/12/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/12/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/12/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/12/12		DD	SW8270
Aniline	ND	10	ug/L	04/12/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/12/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
Benzidine	ND	50	ug/L	04/12/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/12/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/12/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/12/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/12/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
Phenol	ND	10	ug/L	04/12/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/12/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/12/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	04/12/12		DD	15 - 130 %
% Phenol-d5	68		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/12/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/12/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP64 GW

Phoenix I.D.: BB70280

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.05	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/12/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/12/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	04/12/12		DD	15 - 130 %
% Phenol-d5	68		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/12/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	13:01
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70281

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP65 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/12/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/12/12		EK	6010
Barium	0.027	0.002	mg/L	04/12/12		EK	6010
Cadmium	0.022	0.001	mg/L	04/12/12		EK	6010
Chromium	0.006	0.001	mg/L	04/12/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/12/12		LK	6010
Barium (Dissolved)	0.023	0.002	mg/L	04/12/12		LK	6010
Cadmium (Dissolved)	0.019	0.001	mg/L	04/12/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/12/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.050	0.002	mg/L	04/12/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/12/12		EK	6010
Dissolved Metals Preparation	Completed			04/11/12		AG	SW846-3005
Total Metals Digestion	Completed			04/11/12		AG	
Extraction of CT ETPH	Completed			04/11/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/12/12		X/X	SW7470
Mercury Digestion	Completed			04/12/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/12/12		D/D	SW8151
PCB Extraction	Completed			04/11/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/11/12		T	SW3510
Semi-Volatile Extraction	Completed			04/11/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/13/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/13/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/13/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/13/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	77		%	04/13/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	65		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/13/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	71		%	04/13/12		MH	30 - 150 %
% TCMX	67		%	04/13/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP65 GW

Phoenix I.D.: BB70281

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	63		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	79		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/14/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Acetone	ND	25	ug/L	04/14/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/14/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/14/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/14/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/14/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/14/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/14/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/14/12		R/T	SW8260
Trichloroethene	3.4	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/14/12		R/T	70 - 130 %
% Bromofluorobenzene	88		%	04/14/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	04/14/12		R/T	70 - 130 %
% Toluene-d8	93		%	04/14/12		R/T	70 - 130 %

Semivolatiles

1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/12/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/12/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/12/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP65 GW

Phoenix I.D.: BB70281

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/12/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/12/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/12/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/12/12		DD	SW8270
Aniline	ND	10	ug/L	04/12/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/12/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
Benzidine	ND	50	ug/L	04/12/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/12/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/12/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/12/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/12/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
Phenol	ND	10	ug/L	04/12/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/12/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/12/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	76		%	04/12/12		DD	15 - 130 %
% Phenol-d5	71		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	102		%	04/12/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/12/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP65 GW

Phoenix I.D.: BB70281

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/12/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/12/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	69		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	76		%	04/12/12		DD	15 - 130 %
% Phenol-d5	71		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	102		%	04/12/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	14:10
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70282

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: GP67 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/12/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/12/12		EK	6010
Barium	0.023	0.002	mg/L	04/12/12		EK	6010
Cadmium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Chromium	< 0.001	0.001	mg/L	04/12/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/12/12		LK	6010
Barium (Dissolved)	0.021	0.002	mg/L	04/12/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/12/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/12/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/12/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/12/12		EK	6010
Dissolved Metals Preparation	Completed			04/11/12		AG	SW846-3005
Total Metals Digestion	Completed			04/11/12		AG	
Extraction of CT ETPH	Completed			04/11/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/12/12		X/X	SW7470
Mercury Digestion	Completed			04/12/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/12/12		D/D	SW8151
PCB Extraction	Completed			04/11/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/11/12		T	SW3510
Semi-Volatile Extraction	Completed			04/11/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/13/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/13/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/13/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/13/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/13/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/13/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	74		%	04/13/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	74		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/13/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/13/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	94		%	04/13/12		MH	30 - 150 %
% TCMX	78		%	04/13/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.003	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.01	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.002	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.05	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP67 GW

Phoenix I.D.: BB70282

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	88		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	71		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/14/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Acetone	ND	25	ug/L	04/14/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/14/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/14/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/14/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/14/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/14/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/14/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/14/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/14/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/14/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/14/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/14/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/14/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/14/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/14/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/14/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/14/12		R/T	70 - 130 %
% Bromofluorobenzene	86		%	04/14/12		R/T	70 - 130 %
% Dibromofluoromethane	95		%	04/14/12		R/T	70 - 130 %
% Toluene-d8	93		%	04/14/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/12/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/12/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/12/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/12/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/12/12		DD	SW8270

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/12/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/12/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/12/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/12/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/12/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/12/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/12/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/12/12		DD	SW8270
Aniline	ND	10	ug/L	04/12/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/12/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
Benzidine	ND	50	ug/L	04/12/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/12/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/12/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/12/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/12/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/12/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/12/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/12/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/12/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/12/12		DD	SW8270
Phenol	ND	10	ug/L	04/12/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/12/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/12/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/12/12		DD	15 - 130 %
% Phenol-d5	74		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/12/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/12/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: GP67 GW

Phoenix I.D.: BB70282

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/12/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/12/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/12/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/12/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/12/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/12/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/12/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/12/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/12/12		DD	15 - 130 %
% 2-Fluorophenol	74		%	04/12/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/12/12		DD	15 - 130 %
% Phenol-d5	74		%	04/12/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/12/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 18, 2012
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/10/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/11/12	14:58
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 301-40				

Laboratory Data

SDG ID: GBB70278
Phoenix ID: BB70283

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Client ID: TB-3

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/13/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Acetone	ND	25	ug/L	04/13/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CENTURY PROJECT
Client ID: TB-3

Phoenix I.D.: BB70283

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	04/13/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/13/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/13/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/13/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/13/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/13/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/13/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/13/12		R/T	70 - 130 %
% Bromofluorobenzene	86		%	04/13/12		R/T	70 - 130 %
% Dibromofluoromethane	95		%	04/13/12		R/T	70 - 130 %
% Toluene-d8	95		%	04/13/12		R/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CENTURY PROJECT

Phoenix I.D.: BB70283

Client ID: TB-3

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 18, 2012

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 198195, QC Sample No: BB69957 (BB70278, BB70279, BB70280, BB70281)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	99.9	96.0	4.0	102	105	2.9	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 198152, QC Sample No: BB70244 (BB70278, BB70279, BB70280, BB70281, BB70282)												
ICP Metals - Dissolved												
Arsenic	BDL	<0.004	<0.004	NC	93.7	92.1	1.7	92.4	94.6	2.4	75 - 125	20
Barium	BDL	0.047	0.047	0	97.6	95.6	2.1	94.9	97.0	2.2	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	96.1	95.2	0.9	94.5	96.1	1.7	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	95.9	94.8	1.2	93.9	95.7	1.9	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	95.4	94.5	0.9	93.9	95.2	1.4	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	91.5	89.9	1.8	90.9	92.5	1.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	92.4	90.9	1.6	79.1	80.0	1.1	75 - 125	20
QA/QC Batch 198196, QC Sample No: BB70282 (BB70282)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	107	103	3.8	101	99.0	2.0	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 198165, QC Sample No: BB70286 (BB70278, BB70279, BB70280, BB70281, BB70282)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	97.7	97.6	0.1	98.8	100	1.2	75 - 125	20
Barium	BDL	0.006	0.006	NC	102	101	1.0	103	103	0.0	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	100	100	0.0	101	102	1.0	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	99.9	99.9	0.0	101	102	1.0	75 - 125	20
Lead	BDL	0.004	<0.002	NC	99.1	99.3	0.2	100	101	1.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	95.6	94.6	1.1	95.7	96.4	0.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	96.2	95.3	0.9	97.4	98.4	1.0	75 - 125	20

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 18, 2012

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 198169, QC Sample No: BB60293 (BB70278, BB70279, BB70280, BB70281, BB70282)										
Pesticides - Ground Water										
4,4' -DDD	ND	77	72	6.7				40 - 140	20	
4,4' -DDE	ND	84	75	11.3				40 - 140	20	
4,4' -DDT	ND	84	78	7.4				40 - 140	20	
a-BHC	ND	82	74	10.3				40 - 140	20	
a-Chlordane	ND	86	77	11.0				40 - 140	20	
Alachlor	ND	N/A	N/A	NC				40 - 140	20	
Aldrin	ND	80	71	11.9				40 - 140	20	
b-BHC	ND	84	76	10.0				40 - 140	20	
Chlordane	ND	N/A	N/A	NC				40 - 140	20	
d-BHC	ND	85	77	9.9				40 - 140	20	
Dieldrin	ND	85	77	9.9				40 - 140	20	
Endosulfan I	ND	85	76	11.2				40 - 140	20	
Endosulfan II	ND	86	78	9.8				40 - 140	20	
Endosulfan sulfate	ND	84	76	10.0				40 - 140	20	
Endrin	ND	87	80	8.4				40 - 140	20	
Endrin aldehyde	ND	98	88	10.8				40 - 140	20	
Endrin ketone	ND	89	80	10.7				40 - 140	20	
g-BHC	ND	83	73	12.8				40 - 140	20	
g-Chlordane	ND	84	75	11.3				40 - 140	20	
Heptachlor	ND	90	80	11.8				40 - 140	20	
Heptachlor epoxide	ND	83	74	11.5				40 - 140	20	
Methoxychlor	ND	85	78	8.6				40 - 140	20	
Toxaphene	ND	N/A	N/A	NC				40 - 140	20	
% DCBP	76	93	83	11.4				30 - 150	20	
% TCMX	66	75	73	2.7				30 - 150	20	
QA/QC Batch 197887, QC Sample No: BB62185 (BB70278, BB70279, BB70280, BB70281, BB70282)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	81	112	32.1	108	95	12.8	50 - 150	20	r
% n-Pentacosane	60	59	84	35.0	78	68	13.7	50 - 150	20	r
QA/QC Batch 198170, QC Sample No: BB70226 (BB70278, BB70279, BB70280, BB70281, BB70282)										
Polychlorinated Biphenyls - Ground Water										
PCB-1016	ND	95	80	17.1				40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	85	84	1.2				40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% DCBP (Surrogate Rec)	105	103	103	0.0				30 - 150	20	
% TCMX (Surrogate Rec)	96	93	87	6.7				30 - 150	20	
QA/QC Batch 198343, QC Sample No: BB70248 (BB70283)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	125	122	2.4	124	123	0.8	70 - 130	30	
1,1,1-Trichloroethane	ND	100	93	7.3	101	97	4.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	97	101	4.0	96	99	3.1	70 - 130	30	
1,1,2-Trichloroethane	ND	88	89	1.1	88	87	1.1	70 - 130	30	
1,1-Dichloroethane	ND	91	86	5.6	90	89	1.1	70 - 130	30	
1,1-Dichloroethene	ND	95	89	6.5	95	93	2.1	70 - 130	30	
1,1-Dichloropropene	ND	101	98	3.0	99	98	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	88	85	3.5	76	79	3.9	70 - 130	30	
1,2,3-Trichloropropane	ND	94	96	2.1	92	94	2.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	91	90	1.1	83	85	2.4	70 - 130	30	
1,2,4-Trimethylbenzene	ND	109	106	2.8	104	106	1.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	83	85	2.4	74	78	5.3	70 - 130	30	
1,2-Dichlorobenzene	ND	118	97	19.5	95	97	2.1	70 - 130	30	
1,2-Dichloroethane	ND	90	91	1.1	93	93	0.0	70 - 130	30	
1,2-Dichloropropane	ND	89	88	1.1	87	86	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	108	0.9	103	103	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	100	100	0.0	98	98	0.0	70 - 130	30	
1,3-Dichloropropane	ND	93	92	1.1	89	90	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	99	97	2.0	96	96	0.0	70 - 130	30	
2,2-Dichloropropane	ND	78	71	9.4	53	52	1.9	70 - 130	30	m
2-Chlorotoluene	ND	102	100	2.0	99	99	0.0	70 - 130	30	
2-Hexanone	ND	86	88	2.3	73	81	10.4	70 - 130	30	
2-Isopropyltoluene	ND	137	106	25.5	104	106	1.9	70 - 130	30	l
4-Chlorotoluene	ND	102	99	3.0	102	102	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	78	80	2.5	75	76	1.3	70 - 130	30	
Acetone	ND	91	98	7.4	103	101	2.0	70 - 130	30	
Acrylonitrile	ND	85	85	0.0	79	86	8.5	70 - 130	30	
Benzene	ND	97	95	2.1	95	93	2.1	70 - 130	30	
Bromobenzene	ND	96	95	1.0	92	93	1.1	70 - 130	30	
Bromochloromethane	ND	96	93	3.2	97	95	2.1	70 - 130	30	
Bromodichloromethane	ND	96	94	2.1	100	97	3.0	70 - 130	30	
Bromoform	ND	126	127	0.8	128	133	3.8	70 - 130	30	m
Bromomethane	ND	96	92	4.3	83	92	10.3	70 - 130	30	
Carbon Disulfide	ND	>150	142	NC	146	144	1.4	70 - 130	30	l,m
Carbon tetrachloride	ND	109	105	3.7	109	107	1.9	70 - 130	30	
Chlorobenzene	ND	108	106	1.9	108	107	0.9	70 - 130	30	
Chloroethane	ND	95	88	7.7	90	93	3.3	70 - 130	30	
Chloroform	ND	94	88	6.6	94	92	2.2	70 - 130	30	
Chloromethane	ND	96	89	7.6	61	89	37.3	70 - 130	30	m,r
cis-1,2-Dichloroethene	ND	95	91	4.3	91	92	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	88	86	2.3	82	83	1.2	70 - 130	30	
Dibromochloromethane	ND	104	105	1.0	106	105	0.9	70 - 130	30	
Dibromoethane	ND	91	92	1.1	91	92	1.1	70 - 130	30	
Dibromomethane	ND	93	93	0.0	95	94	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	97	90	7.5	74	70	5.6	70 - 130	30	
Ethylbenzene	ND	117	112	4.4	112	111	0.9	70 - 130	30	
Hexachlorobutadiene	ND	92	89	3.3	86	88	2.3	70 - 130	30	
Isopropylbenzene	ND	111	106	4.6	103	103	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
m&p-Xylene	ND	112	107	4.6	109	106	2.8	70 - 130	30	
Methyl ethyl ketone	ND	81	83	2.4	79	80	1.3	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	86	86	0.0	72	74	2.7	70 - 130	30	
Methylene chloride	ND	80	78	2.5	80	81	1.2	70 - 130	30	
Naphthalene	ND	89	89	0.0	69	79	13.5	70 - 130	30	m
n-Butylbenzene	ND	140	104	29.5	97	98	1.0	70 - 130	30	l
n-Propylbenzene	ND	100	97	3.0	101	97	4.0	70 - 130	30	
o-Xylene	ND	110	107	2.8	107	108	0.9	70 - 130	30	
p-Isopropyltoluene	ND	114	111	2.7	104	103	1.0	70 - 130	30	
sec-Butylbenzene	ND	108	104	3.8	104	105	1.0	70 - 130	30	
Styrene	ND	114	108	5.4	109	109	0.0	70 - 130	30	
tert-Butylbenzene	ND	104	101	2.9	101	101	0.0	70 - 130	30	
Tetrachloroethene	ND	105	99	5.9	101	99	2.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	75	77	2.6	74	76	2.7	70 - 130	30	
Toluene	ND	97	94	3.1	95	93	2.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	95	91	4.3	94	93	1.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	91	89	2.2	84	85	1.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	94	93	1.1	73	79	7.9	70 - 130	30	
Trichloroethene	ND	103	101	2.0	103	101	2.0	70 - 130	30	
Trichlorofluoromethane	ND	117	110	6.2	102	96	6.1	70 - 130	30	
Trichlorotrifluoroethane	ND	100	95	5.1	97	88	9.7	70 - 130	30	
Vinyl chloride	ND	93	87	6.7	89	88	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	116	99	15.8	98	99	1.0	70 - 130	30	
% Bromofluorobenzene	87	96	96	0.0	99	99	0.0	70 - 130	30	
% Dibromofluoromethane	97	101	97	4.0	103	102	1.0	70 - 130	30	
% Toluene-d8	93	93	95	2.1	95	94	1.1	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198190, QC Sample No: BB70278 (BB70278, BB70279, BB70280, BB70281, BB70282)

Chlorinated Herbicides - Ground Water

2,4,5-T	ND	100	112	11.3				40 - 140	20	
2,4,5-TP (Silvex)	ND	89	92	3.3				40 - 140	20	
2,4-D	ND	102	115	12.0				40 - 140	20	
2,4-DB	ND	95	105	10.0				40 - 140	20	
Dalapon	ND	79	85	7.3				40 - 140	20	
Dicamba	ND	83	101	19.6				40 - 140	20	
Dichloroprop	ND	86	96	11.0				40 - 140	20	
Dinoseb	ND	45	72	46.2				40 - 140	20	r
% DCAA (Surrogate Rec)	74	66	76	14.1				30 - 150	20	

QA/QC Batch 198156, QC Sample No: BB70278 (BB70278, BB70279, BB70280, BB70281, BB70282)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	58	59	1.7				30 - 130	20	
1,2,4-Trichlorobenzene	ND	83	83	0.0				30 - 130	20	
1,2-Dichlorobenzene	ND	80	81	1.2				30 - 130	20	
1,3-Dichlorobenzene	ND	77	77	0.0				30 - 130	20	
1,4-Dichlorobenzene	ND	82	79	3.7				30 - 130	20	
2,4,5-Trichlorophenol	ND	91	88	3.4				30 - 130	20	
2,4,6-Trichlorophenol	ND	97	95	2.1				30 - 130	20	
2,4-Dichlorophenol	ND	86	88	2.3				30 - 130	20	
2,4-Dimethylphenol	ND	41	41	0.0				30 - 130	20	
2,4-Dinitrophenol	ND	52	49	5.9				30 - 130	20	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	95	95	0.0				30 - 130	20	
2,6-Dinitrotoluene	ND	98	97	1.0				30 - 130	20	
2-Chloronaphthalene	ND	94	96	2.1				30 - 130	20	
2-Chlorophenol	ND	73	73	0.0				30 - 130	20	
2-Methylnaphthalene	ND	90	90	0.0				30 - 130	20	
2-Methylphenol (o-cresol)	ND	70	67	4.4				30 - 130	20	
2-Nitroaniline	ND	>150	>150	NC				30 - 130	20	I
2-Nitrophenol	ND	81	79	2.5				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	73	75	2.7				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	>150	>150	NC				30 - 130	20	I
4,6-Dinitro-2-methylphenol	ND	66	64	3.1				30 - 130	20	
4-Bromophenyl phenyl ether	ND	91	90	1.1				30 - 130	20	
4-Chloro-3-methylphenol	ND	100	100	0.0				30 - 130	20	
4-Chloroaniline	ND	51	50	2.0				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	100	103	3.0				30 - 130	20	
4-Nitroaniline	ND	96	98	2.1				30 - 130	20	
4-Nitrophenol	ND	89	90	1.1				30 - 130	20	
Acenaphthene	ND	96	97	1.0				30 - 130	20	
Acenaphthylene	ND	91	91	0.0				30 - 130	20	
Acetophenone	ND	47	47	0.0				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	93	92	1.1				30 - 130	20	
Azobenzene	ND	50	50	0.0				30 - 130	20	
Benz(a)anthracene	ND	94	94	0.0				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	90	88	2.2				30 - 130	20	
Benzo(b)fluoranthene	ND	91	94	3.2				30 - 130	20	
Benzo(ghi)perylene	ND	91	93	2.2				30 - 130	20	
Benzo(k)fluoranthene	ND	105	100	4.9				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	84	84	0.0				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	84	84	0.0				30 - 130	20	
Bis(2-chloroethyl)ether	ND	71	71	0.0				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	80	80	0.0				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	93	90	3.3				30 - 130	20	
Carbazole	ND	117	116	0.9				30 - 130	20	
Chrysene	ND	97	97	0.0				30 - 130	20	
Dibenz(a,h)anthracene	ND	94	92	2.2				30 - 130	20	
Dibenzofuran	ND	96	95	1.0				30 - 130	20	
Diethyl phthalate	ND	97	97	0.0				30 - 130	20	
Dimethylphthalate	ND	96	96	0.0				30 - 130	20	
Di-n-butylphthalate	ND	100	96	4.1				30 - 130	20	
Di-n-octylphthalate	ND	98	98	0.0				30 - 130	20	
Fluoranthene	ND	100	99	1.0				30 - 130	20	
Fluorene	ND	101	101	0.0				30 - 130	20	
Hexachlorobenzene	ND	98	96	2.1				30 - 130	20	
Hexachlorobutadiene	ND	92	93	1.1				30 - 130	20	
Hexachlorocyclopentadiene	ND	69	70	1.4				30 - 130	20	
Hexachloroethane	ND	86	85	1.2				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	92	94	2.2				30 - 130	20	
Isophorone	ND	66	67	1.5				30 - 130	20	
Naphthalene	ND	90	91	1.1				30 - 130	20	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Nitrobenzene	ND	92	89	3.3				30 - 130	20	
N-Nitrosodimethylamine	ND	52	48	8.0				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	92	89	3.3				30 - 130	20	
N-Nitrosodiphenylamine	ND	97	98	1.0				30 - 130	20	
Pentachloronitrobenzene	ND	109	107	1.9				30 - 130	20	
Pentachlorophenol	ND	85	82	3.6				30 - 130	20	
Phenanthrene	ND	101	101	0.0				30 - 130	20	
Phenol	ND	67	66	1.5				30 - 130	20	
Pyrene	ND	103	104	1.0				30 - 130	20	
Pyridine	ND	<5	<5	NC				30 - 130	20	I
% 2,4,6-Tribromophenol	112	92	89	3.3				15 - 130	20	
% 2-Fluorobiphenyl	69	86	86	0.0				30 - 130	20	
% 2-Fluorophenol	75	59	57	3.4				15 - 130	20	
% Nitrobenzene-d5	83	86	84	2.4				30 - 130	20	
% Phenol-d5	74	58	58	0.0				15 - 130	20	
% Terphenyl-d14	96	111	108	2.7				30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198443, QC Sample No: BB70652 (BB70282)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	128	133	3.8	129	126	2.4	70 - 130	30	I
1,1,1-Trichloroethane	ND	107	103	3.8	99	97	2.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	97	99	2.0	94	100	6.2	70 - 130	30	
1,1,2-Trichloroethane	ND	86	90	4.5	90	93	3.3	70 - 130	30	
1,1-Dichloroethane	ND	92	93	1.1	88	88	0.0	70 - 130	30	
1,1-Dichloroethene	ND	96	98	2.1	94	94	0.0	70 - 130	30	
1,1-Dichloropropene	ND	108	108	0.0	104	100	3.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	78	89	13.2	75	81	7.7	70 - 130	30	
1,2,3-Trichloropropane	ND	96	96	0.0	92	95	3.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	84	88	4.7	82	88	7.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	112	111	0.9	104	105	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	71	82	14.4	71	78	9.4	70 - 130	30	
1,2-Dichlorobenzene	ND	99	100	1.0	97	101	4.0	70 - 130	30	
1,2-Dichloroethane	ND	98	97	1.0	98	97	1.0	70 - 130	30	
1,2-Dichloropropane	ND	92	92	0.0	88	89	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	114	113	0.9	104	104	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	103	103	0.0	98	101	3.0	70 - 130	30	
1,3-Dichloropropane	ND	92	95	3.2	91	91	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	99	100	1.0	97	97	0.0	70 - 130	30	
2,2-Dichloropropane	ND	69	72	4.3	52	50	3.9	70 - 130	30	I,m
2-Chlorotoluene	ND	106	104	1.9	98	100	2.0	70 - 130	30	
2-Hexanone	ND	76	84	10.0	79	81	2.5	70 - 130	30	
2-Isopropyltoluene	ND	112	113	0.9	108	108	0.0	70 - 130	30	
4-Chlorotoluene	ND	104	103	1.0	103	103	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	72	78	8.0	78	80	2.5	70 - 130	30	
Acetone	ND	103	100	3.0	95	96	1.0	70 - 130	30	
Acrylonitrile	ND	77	85	9.9	81	85	4.8	70 - 130	30	
Benzene	ND	101	100	1.0	97	96	1.0	70 - 130	30	
Bromobenzene	ND	96	97	1.0	91	93	2.2	70 - 130	30	
Bromochloromethane	ND	98	97	1.0	97	100	3.0	70 - 130	30	
Bromodichloromethane	ND	101	102	1.0	101	98	3.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromoform	ND	147	149	1.4	138	135	2.2	70 - 130	30	l,m
Bromomethane	ND	97	100	3.0	80	89	10.7	70 - 130	30	
Carbon Disulfide	ND	>150	>150	NC	142	140	1.4	70 - 130	30	l,m
Carbon tetrachloride	ND	123	122	0.8	115	110	4.4	70 - 130	30	
Chlorobenzene	ND	114	113	0.9	112	113	0.9	70 - 130	30	
Chloroethane	ND	90	97	7.5	80	91	12.9	70 - 130	30	
Chloroform	ND	100	96	4.1	92	91	1.1	70 - 130	30	
Chloromethane	ND	95	98	3.1	56	59	5.2	70 - 130	30	m
cis-1,2-Dichloroethene	ND	93	96	3.2	91	91	0.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	86	88	2.3	85	82	3.6	70 - 130	30	
Dibromochloromethane	ND	108	113	4.5	107	106	0.9	70 - 130	30	
Dibromoethane	ND	93	93	0.0	94	94	0.0	70 - 130	30	
Dibromomethane	ND	97	100	3.0	98	99	1.0	70 - 130	30	
Dichlorodifluoromethane	ND	103	101	2.0	70	63	10.5	70 - 130	30	m
Ethylbenzene	ND	118	123	4.1	117	118	0.9	70 - 130	30	
Hexachlorobutadiene	ND	89	96	7.6	89	91	2.2	70 - 130	30	
Isopropylbenzene	ND	113	110	2.7	104	106	1.9	70 - 130	30	
m&p-Xylene	ND	118	116	1.7	115	109	5.4	70 - 130	30	
Methyl ethyl ketone	ND	81	>150	NC	78	78	0.0	70 - 130	30	l
Methyl t-butyl ether (MTBE)	ND	68	70	2.9	70	72	2.8	70 - 130	30	l
Methylene chloride	ND	81	82	1.2	78	78	0.0	70 - 130	30	
Naphthalene	ND	71	85	17.9	66	80	19.2	70 - 130	30	m
n-Butylbenzene	ND	108	110	1.8	101	100	1.0	70 - 130	30	
n-Propylbenzene	ND	104	102	1.9	101	98	3.0	70 - 130	30	
o-Xylene	ND	121	116	4.2	111	106	4.6	70 - 130	30	
p-Isopropyltoluene	ND	115	116	0.9	106	106	0.0	70 - 130	30	
sec-Butylbenzene	ND	110	111	0.9	105	105	0.0	70 - 130	30	
Styrene	ND	127	123	3.2	117	112	4.4	70 - 130	30	
tert-Butylbenzene	ND	107	107	0.0	101	102	1.0	70 - 130	30	
Tetrachloroethene	ND	109	109	0.0	108	99	8.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	74	74	0.0	73	75	2.7	70 - 130	30	
Toluene	ND	103	101	2.0	98	96	2.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	95	98	3.1	93	92	1.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	85	90	5.7	87	85	2.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	77	84	8.7	67	70	4.4	70 - 130	30	m
Trichloroethene	ND	110	110	0.0	107	103	3.8	70 - 130	30	
Trichlorofluoromethane	ND	130	126	3.1	102	98	4.0	70 - 130	30	
Trichlorotrifluoroethane	ND	103	105	1.9	99	94	5.2	70 - 130	30	
Vinyl chloride	ND	93	96	3.2	86	87	1.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	96	97	98	1.0	97	100	3.0	70 - 130	30	
% Bromofluorobenzene	87	98	97	1.0	97	91	6.4	70 - 130	30	
% Dibromofluoromethane	95	100	98	2.0	101	101	0.0	70 - 130	30	
% Toluene-d8	94	95	95	0.0	95	95	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198431, QC Sample No: BB70931 (BB70279, BB70280, BB70281)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	128	127	0.8	126	125	0.8	70 - 130	30	
1,1,1-Trichloroethane	ND	100	95	5.1	99	95	4.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	98	100	2.0	95	98	3.1	70 - 130	30	
1,1,2-Trichloroethane	ND	91	87	4.5	85	86	1.2	70 - 130	30	
1,1-Dichloroethane	ND	90	89	1.1	86	86	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethene	ND	93	87	6.7	91	93	2.2	70 - 130	30	
1,1-Dichloropropene	ND	100	96	4.1	98	97	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	85	84	1.2	75	80	6.5	70 - 130	30	
1,2,3-Trichloropropane	ND	96	97	1.0	92	95	3.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	88	86	2.3	82	85	3.6	70 - 130	30	
1,2,4-Trimethylbenzene	ND	110	110	0.0	107	104	2.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	82	79	3.7	73	77	5.3	70 - 130	30	
1,2-Dichlorobenzene	ND	99	98	1.0	98	97	1.0	70 - 130	30	
1,2-Dichloroethane	ND	94	91	3.2	96	93	3.2	70 - 130	30	
1,2-Dichloropropane	ND	89	87	2.3	86	85	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	110	110	0.0	104	105	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	101	101	0.0	100	99	1.0	70 - 130	30	
1,3-Dichloropropane	ND	93	92	1.1	88	89	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	98	96	2.1	98	98	0.0	70 - 130	30	
2,2-Dichloropropane	ND	87	63	32.0	68	66	3.0	70 - 130	30	l,m,r
2-Chlorotoluene	ND	102	104	1.9	99	99	0.0	70 - 130	30	
2-Hexanone	ND	83	81	2.4	74	77	4.0	70 - 130	30	
2-Isopropyltoluene	ND	109	104	4.7	108	106	1.9	70 - 130	30	
4-Chlorotoluene	ND	101	103	2.0	103	103	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	80	76	5.1	75	76	1.3	70 - 130	30	
Acetone	ND	105	104	1.0	95	98	3.1	70 - 130	30	
Acrylonitrile	ND	86	82	4.8	83	82	1.2	70 - 130	30	
Benzene	ND	98	95	3.1	92	92	0.0	70 - 130	30	
Bromobenzene	ND	96	97	1.0	92	91	1.1	70 - 130	30	
Bromochloromethane	ND	98	93	5.2	94	93	1.1	70 - 130	30	
Bromodichloromethane	ND	97	95	2.1	98	94	4.2	70 - 130	30	
Bromoform	ND	135	135	0.0	144	142	1.4	70 - 130	30	l,m
Bromomethane	ND	96	91	5.3	80	91	12.9	70 - 130	30	
Carbon Disulfide	ND	150	133	12.0	139	140	0.7	70 - 130	30	l,m
Carbon tetrachloride	ND	110	105	4.7	109	108	0.9	70 - 130	30	
Chlorobenzene	ND	109	107	1.9	109	108	0.9	70 - 130	30	
Chloroethane	ND	93	89	4.4	89	90	1.1	70 - 130	30	
Chloroform	ND	94	93	1.1	92	90	2.2	70 - 130	30	
Chloromethane	ND	91	85	6.8	85	85	0.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	94	92	2.2	90	89	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	91	82	10.4	83	83	0.0	70 - 130	30	
Dibromochloromethane	ND	106	106	0.0	108	104	3.8	70 - 130	30	
Dibromoethane	ND	93	91	2.2	90	91	1.1	70 - 130	30	
Dibromomethane	ND	97	94	3.1	96	93	3.2	70 - 130	30	
Dichlorodifluoromethane	ND	97	86	12.0	93	90	3.3	70 - 130	30	
Ethylbenzene	ND	118	115	2.6	115	113	1.8	70 - 130	30	
Hexachlorobutadiene	ND	89	86	3.4	89	90	1.1	70 - 130	30	
Isopropylbenzene	ND	107	110	2.8	105	105	0.0	70 - 130	30	
m&p-Xylene	ND	112	111	0.9	113	111	1.8	70 - 130	30	
Methyl ethyl ketone	ND	80	80	0.0	77	78	1.3	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	73	70	4.2	64	67	4.6	70 - 130	30	m
Methylene chloride	ND	80	80	0.0	77	77	0.0	70 - 130	30	
Naphthalene	ND	83	81	2.4	63	76	18.7	70 - 130	30	m
n-Butylbenzene	ND	107	99	7.8	104	102	1.9	70 - 130	30	
n-Propylbenzene	ND	100	98	2.0	101	102	1.0	70 - 130	30	
o-Xylene	ND	113	111	1.8	111	111	0.0	70 - 130	30	
p-Isopropyltoluene	ND	113	112	0.9	106	105	0.9	70 - 130	30	
sec-Butylbenzene	ND	105	105	0.0	107	106	0.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Styrene	ND	117	113	3.5	116	118	1.7	70 - 130	30	
tert-Butylbenzene	ND	103	104	1.0	102	100	2.0	70 - 130	30	
Tetrachloroethene	ND	104	100	3.9	102	100	2.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	76	74	2.7	71	74	4.1	70 - 130	30	
Toluene	ND	97	95	2.1	93	91	2.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	94	91	3.2	91	90	1.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	91	85	6.8	87	85	2.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	83	78	6.2	75	76	1.3	70 - 130	30	
Trichloroethene	ND	104	99	4.9	102	100	2.0	70 - 130	30	
Trichlorofluoromethane	ND	118	106	10.7	99	97	2.0	70 - 130	30	
Trichlorotrifluoroethane	ND	99	86	14.1	94	94	0.0	70 - 130	30	
Vinyl chloride	ND	88	81	8.3	82	84	2.4	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	98	99	1.0	99	98	1.0	70 - 130	30	
% Bromofluorobenzene	87	96	97	1.0	98	97	1.0	70 - 130	30	
% Dibromofluoromethane	97	101	99	2.0	101	100	1.0	70 - 130	30	
% Toluene-d8	95	94	93	1.1	94	94	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198531, QC Sample No: BB71674 (BB70278, BB70279 (5X))

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	123	117	5.0	125	127	1.6	70 - 130	30	
1,1,1-Trichloroethane	ND	94	82	13.6	90	93	3.3	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	96	96	0.0	100	101	1.0	70 - 130	30	
1,1,2-Trichloroethane	ND	97	93	4.2	96	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	86	75	13.7	82	84	2.4	70 - 130	30	
1,1-Dichloroethene	ND	89	79	11.9	86	92	6.7	70 - 130	30	
1,1-Dichloropropene	ND	98	85	14.2	93	98	5.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	92	92	0.0	89	93	4.4	70 - 130	30	
1,2,3-Trichloropropane	ND	89	93	4.4	91	96	5.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	95	90	5.4	91	96	5.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	106	96	9.9	100	105	4.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	91	93	2.2	88	86	2.3	70 - 130	30	
1,2-Dichlorobenzene	ND	102	95	7.1	102	104	1.9	70 - 130	30	
1,2-Dichloroethane	ND	95	88	7.7	93	95	2.1	70 - 130	30	
1,2-Dichloropropane	ND	110	101	8.5	93	97	4.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	103	94	9.1	98	103	5.0	70 - 130	30	
1,3-Dichlorobenzene	ND	101	94	7.2	101	104	2.9	70 - 130	30	
1,3-Dichloropropane	ND	96	92	4.3	97	95	2.1	70 - 130	30	
1,4-Dichlorobenzene	ND	98	90	8.5	96	99	3.1	70 - 130	30	
2,2-Dichloropropane	ND	46	40	14.0	<40	<40	NC	70 - 130	30	l,m
2-Chlorotoluene	ND	97	90	7.5	95	101	6.1	70 - 130	30	
2-Hexanone	ND	83	86	3.6	81	82	1.2	70 - 130	30	
2-Isopropyltoluene	ND	107	97	9.8	101	106	4.8	70 - 130	30	
4-Chlorotoluene	ND	97	90	7.5	99	103	4.0	70 - 130	30	
4-Methyl-2-pentanone	ND	84	84	0.0	83	78	6.2	70 - 130	30	
Acetone	ND	97	92	5.3	89	94	5.5	70 - 130	30	
Acrylonitrile	ND	84	80	4.9	83	83	0.0	70 - 130	30	
Benzene	ND	97	86	12.0	93	98	5.2	70 - 130	30	
Bromobenzene	ND	94	89	5.5	95	98	3.1	70 - 130	30	
Bromochloromethane	ND	99	91	8.4	98	98	0.0	70 - 130	30	
Bromodichloromethane	ND	127	118	7.3	119	121	1.7	70 - 130	30	
Bromoform	ND	139	141	1.4	>150	146	NC	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromomethane	ND	96	82	15.7	70	86	20.5	70 - 130	30	
Carbon Disulfide	ND	140	121	14.6	122	129	5.6	70 - 130	30	l
Carbon tetrachloride	ND	105	93	12.1	100	106	5.8	70 - 130	30	
Chlorobenzene	ND	107	97	9.8	105	109	3.7	70 - 130	30	
Chloroethane	ND	86	79	8.5	70	86	20.5	70 - 130	30	
Chloroform	ND	91	81	11.6	88	88	0.0	70 - 130	30	
Chloromethane	ND	90	77	15.6	80	83	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	93	84	10.2	90	92	2.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	90	86	4.5	88	89	1.1	70 - 130	30	
Dibromochloromethane	ND	117	112	4.4	118	117	0.9	70 - 130	30	
Dibromoethane	ND	99	96	3.1	101	102	1.0	70 - 130	30	
Dibromomethane	ND	114	112	1.8	103	105	1.9	70 - 130	30	
Dichlorodifluoromethane	ND	92	82	11.5	89	92	3.3	70 - 130	30	
Ethylbenzene	ND	108	98	9.7	104	110	5.6	70 - 130	30	
Hexachlorobutadiene	ND	91	81	11.6	92	94	2.2	70 - 130	30	
Isopropylbenzene	ND	99	91	8.4	99	104	4.9	70 - 130	30	
m&p-Xylene	ND	108	99	8.7	106	110	3.7	70 - 130	30	
Methyl ethyl ketone	ND	79	77	2.6	75	75	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	73	70	4.2	73	72	1.4	70 - 130	30	
Methylene chloride	ND	80	73	9.2	77	78	1.3	70 - 130	30	
Naphthalene	ND	92	92	0.0	82	88	7.1	70 - 130	30	
n-Butylbenzene	ND	101	90	11.5	93	98	5.2	70 - 130	30	
n-Propylbenzene	ND	92	84	9.1	91	98	7.4	70 - 130	30	
o-Xylene	ND	110	104	5.6	132	112	16.4	70 - 130	30	m
p-Isopropyltoluene	ND	109	99	9.6	99	104	4.9	70 - 130	30	
sec-Butylbenzene	ND	101	92	9.3	100	105	4.9	70 - 130	30	
Styrene	ND	109	104	4.7	128	112	13.3	70 - 130	30	
tert-Butylbenzene	ND	98	89	9.6	98	103	5.0	70 - 130	30	
Tetrachloroethene	ND	108	95	12.8	104	106	1.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	75	74	1.3	75	75	0.0	70 - 130	30	
Toluene	ND	103	92	11.3	100	104	3.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	91	79	14.1	86	90	4.5	70 - 130	30	
trans-1,3-Dichloropropene	ND	93	89	4.4	93	93	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	77	76	1.3	68	71	4.3	70 - 130	30	m
Trichloroethene	ND	105	94	11.1	101	107	5.8	70 - 130	30	
Trichlorofluoromethane	ND	112	97	14.4	92	95	3.2	70 - 130	30	
Trichlorotrifluoroethane	ND	91	82	10.4	92	96	4.3	70 - 130	30	
Vinyl chloride	ND	88	78	12.0	81	84	3.6	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	98	101	3.0	102	101	1.0	70 - 130	30	
% Bromofluorobenzene	91	98	100	2.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	98	102	102	0.0	104	101	2.9	70 - 130	30	
% Toluene-d8	99	98	98	0.0	101	101	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

QA/QC Data

SDG I.D.: GBB70278

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 18, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB70278

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB70278	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70278	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB70278	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB70278	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB70278	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB70279	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70279	MAGU-DAS	$8260GWR	Trichloroethene	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	62	5.0	5	5	ug/L
BB70279	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB70279	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB70279	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB70279	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB70280	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70280	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB70280	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB70280	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB70280	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB70281	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70281	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB70281	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB70281	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB70281	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB70281	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.022	0.001	0.005	0.005	mg/L
BB70281	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.022	0.001	0.006	0.006	mg/L
BB70281	MAGU-DAS	D-CD	Cadmium (Dissolved)	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.019	0.001	0.005	0.005	mg/L
BB70281	MAGU-DAS	D-CD	Cadmium (Dissolved)	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.019	0.001	0.006	0.006	mg/L
BB70281	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.050	0.002	0.015	0.015	mg/L
BB70281	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.050	0.002	0.013	0.013	mg/L
BB70282	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70282	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB70282	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB70282	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB70282	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB70283	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB70283	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB70278

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CE **Project Number:**

Laboratory Sample ID(s): BB70278, BB70279, BB70280, BB70281, BB70282, BB70283

Sampling Date(s): 4/10/2012

RCP Methods Used:

☐ 1311/1312	☑ 6010	☐ 7000	☐ 7196	☑ 7470/7471	☑ 8081	☐ EPH	☐ TO15
☑ 8082	☑ 8151	☑ 8260	☑ 8270	☑ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, Herbicide Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☑ Yes ☐ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Kathleen Cressia

Date: Wednesday, April 18, 2012

Printed Name: Kathleen Cressia

Position: QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Pyridine was analyzed only by full scan and the reporting level does not meet GWP criteria.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWP criteria.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197887 (Samples: BB70278, BB70279, BB70280, BB70281, BB70282): -----

One or more surrogates is outside of criteria. (% n-Pentacosane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Ext. Petroleum HC)

Instrument: Au-fid1 04/12/12-2 (BB70278, BB70279, BB70280, BB70281, BB70282)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/12/2012

QC (Batch Specific)

---------- Sample No: BB62185, QA/QC Batch: 197887 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % n-Pentacosane(35.0%), Ext. Petroleum HC(32.1%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198190 (Samples: BB70278, BB70279, BB70280, BB70281, BB70282): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Dinoseb)

Instrument: Au-ecd14 04/13/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

Initial Calibration ECD14-040712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 4/13/2012

QC Comments: QC Batch 98190 04/12/12 (BB70278, BB70279, BB70280, BB70281, BB70282)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB70278, QA/QC Batch: 198190 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: Dinoseb(46.2%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/12/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/12/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

QC (Site Specific)

---------- Sample No: BB70282, QA/QC Batch: 198196 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB69957, QA/QC Batch: 198195 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 04/11/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/11/2012

Instrument: Icp9 04/12/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/12/2012

QC (Batch Specific)

---------- Sample No: BB70244, QA/QC Batch: 198152 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB70286, QA/QC Batch: 198165 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 04/13/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/13/2012

QC Comments: QC Batch 98170 04/11/12 (BB70278, BB70279, BB70280, BB70281, BB70282)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

QC (Batch Specific)

---------- Sample No: BB70226, QA/QC Batch: 198170 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/10/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Mark Rochette
Position: Chemist
Date: 4/10/2012

QC Comments: QC Batch 98169 04/11/12 (BB70278, BB70279, BB70280, BB70281, BB70282)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB60293, QA/QC Batch: 198169 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198156 (Samples: BB70278, BB70279, BB70280, BB70281, BB70282): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Pyridine)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3-Nitroaniline)

Instrument: Chem09 04/12/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0411):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 4-chloroaniline, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, 3,3'-dichlorobenzidine

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: 4-Chloroaniline, 2-Nitroaniline

Printed Name Damien Drobinski
Position: Chemist
Date: 4/12/2012

QC Comments: QC Batch 98156 04/11/12 (BB70278, BB70279, BB70280, BB70281, BB70282)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB70278, QA/QC Batch: 198156 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(<5%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2-Nitroaniline(>150%), 3-Nitroaniline(>150%), Pyridine(<5%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

Instrument: Chem04 04/12/12-1 (BB70278, BB70279, BB70280, BB70281, BB70282)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0407):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: % 2,4,6-Tribromophenol, Atrazine, Pentachlorophenol

Printed Name Damien Drobinski
Position: Chemist
Date: 4/12/2012

QC Comments: QC Batch 98156 04/11/12 (BB70278, BB70279, BB70280, BB70281, BB70282)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198343 (Samples: BB70283): -----

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Isopropyltoluene, Carbon Disulfide, n-Butylbenzene)

QC Batch 198431 (Samples: BB70279, BB70280, BB70281): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (2,2-Dichloropropane)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Carbon Disulfide)

QC Batch 198443 (Samples: BB70282): -----

One or more analytes is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Methyl t-butyl ether (MTBE))

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (1,1,1,2-Tetrachloroethane, Bromoform, Carbon Disulfide, Methyl ethyl ketone)

QC Batch 198531 (Samples: BB70278, BB70279): -----

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Carbon Disulfide)

Instrument: Chem08 04/12/12-2 (BB70283)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide, Bromoform

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

Printed Name Tina Covensky
Position: Chemist
Date: 4/12/2012

Instrument: Chem08 04/13/12-1 (BB70279, BB70280, BB70281)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide, Bromoform

Printed Name Tina Covensky
Position: Chemist
Date: 4/13/2012

Instrument: Chem08 04/13/12-2 (BB70282)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations:

Printed Name Tina Covensky
Position: Chemist
Date: 4/13/2012

Instrument: Chem08 04/15/12-3 (BB70278, BB70279)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide, 2,2-Dichloropropane, Bromodichloromethane, 1,1,1,2-Tetrachloroethane, Bromoform

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

Printed Name Tina Covensky
Position: Chemist
Date: 4/15/2012

QC Comments: QC Batch 98343 04/13/12 (BB70283)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98431 04/16/12 (BB70279, BB70280, BB70281)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98443 04/16/12 (BB70282)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98531 04/17/12 (BB70278, BB70279)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB70278

QC (Batch Specific)

---------- Sample No: BB70248, QA/QC Batch: 198343 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Isopropyltoluene(137%), Carbon Disulfide(>150%), n-Butylbenzene(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(142%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB70652, QA/QC Batch: 198443 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(69%), Bromoform(147%), Carbon Disulfide(>150%), Methyl t-butyl ether (MTBE)(68%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 1,1,1,2-Tetrachloroethane(133%), Bromoform(149%), Carbon Disulfide(>150%), Methyl ethyl ketone(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB70931, QA/QC Batch: 198431 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromoform(135%), Carbon Disulfide(150%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(63%), Bromoform(135%), Carbon Disulfide(133%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 2,2-Dichloropropane(32.0%)

---------- Sample No: BB71674, QA/QC Batch: 198531 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(46%), Bromoform(139%), Carbon Disulfide(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(40%), Bromoform(141%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6° Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy.
Rocky Hill, CT 06067

Project: Metro North Railroad Catenary Proj.
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project ~~P.O.~~: 301-145 301-40
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: Cindy Gf Date: 4-10-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pesticides + PCBs 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 Metals								Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
70278	GP-60 GW	GW	4-10-12	6:41am	X	X	X	X	X	X	X										3	6			2			
70279	GP-62 GW	↓	↓	9:24am	↓	↓	↓	↓	↓	↓	↓										↓	↓			↓			
70280	GP-64 GW	↓	↓	11:04am	↓	↓	↓	↓	↓	↓	↓										↓	↓			↓			
70281	GP-65 GW	↓	↓	1:01pm	↓	↓	↓	↓	↓	↓	↓										↓	↓			↓			
70282	GP-67 GW	↓	↓	2:10pm	↓	↓	↓	↓	↓	↓	↓										↓	↓			↓			
70283	TB-3	↓	↓	-	↓																2							

Relinquished by:	Accepted by:	Date:	Time:
Cindy Gf	[signature]	4/11/12	7:30
[signature]	[signature]	4/11/12	1458

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☒ Other General Permit Disch Limits

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Wednesday, April 18, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB69754 - BB69758

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/09/12	8:57
Location Code:	MAGU-DAS	Received by:	LB	04/10/12	15:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145-301-40				

Laboratory Data

SDG ID: GBB69754
Phoenix ID: BB69754

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/11/12		EK	6010
Arsenic	0.105	0.004	mg/L	04/11/12		EK	6010
Barium	0.501	0.002	mg/L	04/11/12		EK	6010
Cadmium	0.001	0.001	mg/L	04/11/12		EK	6010
Chromium	0.110	0.001	mg/L	04/11/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/11/12		LK	6010
Barium (Dissolved)	0.036	0.002	mg/L	04/11/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/11/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/11/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.119	0.002	mg/L	04/11/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/11/12		EK	6010
Dissolved Metals Preparation	Completed			04/10/12		AG	SW846-3005
Total Metals Digestion	Completed			04/10/12		AG	
Extraction of CT ETPH	Completed			04/10/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/11/12		X/X	SW7470
Mercury Digestion	Completed			04/11/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/11/12		D/D	SW8151
PCB Extraction	Completed			04/10/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/10/12		T	SW3510
Semi-Volatile Extraction	Completed			04/13/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/12/12		JRB	SW8151

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 GW

Phoenix I.D.: BB69754

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/12/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/12/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/12/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	69		%	04/12/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	68		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		AW	608/ 8082
QA/QC Surrogates							
% DCBP	71		%	04/11/12		AW	30 - 150 %
% TCMX	77		%	04/11/12		AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 GW

Phoenix I.D.: BB69754

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.5	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	81		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	80		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/11/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Acetone	ND	25	ug/L	04/11/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/11/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/11/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/11/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/11/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/11/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/11/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/11/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/11/12		R/T	70 - 130 %
% Bromofluorobenzene	87		%	04/11/12		R/T	70 - 130 %
% Dibromofluoromethane	99		%	04/11/12		R/T	70 - 130 %
% Toluene-d8	98		%	04/11/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/11/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/11/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/11/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 GW

Phoenix I.D.: BB69754

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/11/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/11/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/11/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/11/12		DD	SW8270
Aniline	ND	10	ug/L	04/11/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/11/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
Benzidine	ND	50	ug/L	04/11/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/11/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/11/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/11/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/11/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
Phenol	ND	10	ug/L	04/11/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/11/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/11/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	35		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	19		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	04/11/12		DD	15 - 130 %
% Phenol-d5	17		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/11/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.06	0.040	ug/L	04/17/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 GW

Phoenix I.D.: BB69754

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.08	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/17/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/17/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.01	0.010	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/17/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/17/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/17/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/17/12		DD	SW8270 (SIM)
Phenanthrene	0.07	0.050	ug/L	04/17/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	35		%	04/17/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/17/12		DD	15 - 130 %
% 2-Fluorophenol	19		%	04/17/12		DD	15 - 130 %
% Nitrobenzene-d5	72		%	04/17/12		DD	15 - 130 %
% Phenol-d5	17		%	04/17/12		DD	15 - 130 %
% Terphenyl-d14	95		%	04/17/12		DD	15 - 130 %

Comments:

*For semivolatiles, poor surrogate recovery was observed. Sample was re-extracted with similar results. The other surrogates associated with this sample were within QA/QC criteria. No further action was necessary.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/09/12	14:21
Location Code:	MAGU-DAS	Received by:	LB	04/10/12	15:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145-301-40				

Laboratory Data

SDG ID: GBB69754
Phoenix ID: BB69755

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-20 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/11/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/11/12		EK	6010
Barium	< 0.002	0.002	mg/L	04/11/12		EK	6010
Cadmium	< 0.001	0.001	mg/L	04/11/12		EK	6010
Chromium	< 0.001	0.001	mg/L	04/11/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/11/12		LK	6010
Barium (Dissolved)	< 0.002	0.002	mg/L	04/11/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/11/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/11/12		LK	6010
Mercury	< 0.0004	0.0004	mg/L	04/13/12		RS	7470/E245.1
Lead	< 0.002	0.002	mg/L	04/11/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/11/12		EK	6010
Dissolved Metals Preparation	Completed			04/10/12		AG	SW846-3005
Total Metals Digestion	Completed			04/10/12		AG	
Extraction of CT ETPH	Completed			04/10/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/11/12		X/X	SW7470
Mercury Digestion	Completed			04/11/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/11/12		D/D	SW8151
PCB Extraction	Completed			04/10/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/10/12		T	SW3510
Semi-Volatile Extraction	Completed			04/10/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/12/12		JRB	SW8151

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 GW

Phoenix I.D.: BB69755

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/12/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/12/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/12/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	76		%	04/12/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	61		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		AW	608/ 8082
QA/QC Surrogates							
% DCBP	60		%	04/11/12		AW	30 - 150 %
% TCMX	67		%	04/11/12		AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 GW

Phoenix I.D.: BB69755

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.5	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	76		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	80		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/11/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Acetone	ND	25	ug/L	04/11/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/11/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/11/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/11/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/11/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/11/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/11/12		R/T	SW8260
Toluene	ND	1.1	ug/L	04/11/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/11/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	04/11/12		R/T	70 - 130 %
% Bromofluorobenzene	89		%	04/11/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	04/11/12		R/T	70 - 130 %
% Toluene-d8	97		%	04/11/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/11/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/11/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/11/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 GW

Phoenix I.D.: BB69755

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/11/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/11/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/11/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/11/12		DD	SW8270
Aniline	ND	10	ug/L	04/11/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/11/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
Benzidine	ND	50	ug/L	04/11/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/11/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/11/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/11/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/11/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
Phenol	ND	10	ug/L	04/11/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/11/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/11/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	78		%	04/11/12		DD	15 - 130 %
% Phenol-d5	71		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	90		%	04/11/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benz(a)anthracene	ND	0.040	ug/L	04/11/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-20 GW

Phoenix I.D.: BB69755

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Chrysene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	ND	0.010	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/11/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/11/12		DD	SW8270 (SIM)
Phenanthrene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	110		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	73		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	70		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	78		%	04/11/12		DD	15 - 130 %
% Phenol-d5	71		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	90		%	04/11/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/09/12	10:10
Location Code:	MAGU-DAS	Received by:	LB	04/10/12	15:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145-301-40				

Laboratory Data

SDG ID: GBB69754
Phoenix ID: BB69756

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-21 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/11/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/11/12		EK	6010
Barium	0.049	0.002	mg/L	04/11/12		EK	6010
Cadmium	< 0.001	0.001	mg/L	04/11/12		EK	6010
Chromium	0.005	0.001	mg/L	04/11/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/11/12		LK	6010
Barium (Dissolved)	0.034	0.002	mg/L	04/11/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/13/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/12/12		EK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/11/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.027	0.002	mg/L	04/11/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/11/12		EK	6010
Dissolved Metals Preparation	Completed			04/10/12		AG	SW846-3005
Total Metals Digestion	Completed			04/10/12		AG	
Extraction of CT ETPH	Completed			04/10/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/11/12		X/X	SW7470
Mercury Digestion	Completed			04/11/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/11/12		D/D	SW8151
PCB Extraction	Completed			04/10/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/10/12		T	SW3510
Semi-Volatile Extraction	Completed			04/10/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/12/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/12/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/12/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/12/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	04/12/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	69		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		AW	608/ 8082
QA/QC Surrogates							
% DCBP	69		%	04/11/12		AW	30 - 150 %
% TCMX	69		%	04/11/12		AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 GW

Phoenix I.D.: BB69756

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.5	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	73		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/13/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Acetone	ND	25	ug/L	04/13/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/13/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/13/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/13/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/13/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/13/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/13/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/13/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/13/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/13/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/13/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/13/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/13/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/13/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/13/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/13/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/13/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	04/13/12		R/T	70 - 130 %
% Bromofluorobenzene	89		%	04/13/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	04/13/12		R/T	70 - 130 %
% Toluene-d8	95		%	04/13/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/11/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/11/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/11/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 GW

Phoenix I.D.: BB69756

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/11/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/11/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/11/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/11/12		DD	SW8270
Aniline	ND	10	ug/L	04/11/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/11/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
Benzidine	ND	50	ug/L	04/11/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/11/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/11/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/11/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/11/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
Phenol	ND	10	ug/L	04/11/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/11/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/11/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	73		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/11/12		DD	15 - 130 %
% Phenol-d5	73		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	103		%	04/11/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.25	0.040	ug/L	04/11/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-21 GW

Phoenix I.D.: BB69756

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.23	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.43	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.11	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	2.4	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Chrysene	0.27	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.03	0.010	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/11/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.18	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/11/12		DD	SW8270 (SIM)
Phenanthrene	0.38	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	73		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/11/12		DD	15 - 130 %
% Phenol-d5	73		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	103		%	04/11/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/09/12	11:15
Location Code:	MAGU-DAS	Received by:	LB	04/10/12	15:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145-301-40				

Laboratory Data

SDG ID: GBB69754
Phoenix ID: BB69757

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/11/12		EK	6010
Arsenic	< 0.004	0.004	mg/L	04/11/12		EK	6010
Barium	0.076	0.002	mg/L	04/11/12		EK	6010
Cadmium	0.001	0.001	mg/L	04/12/12		EK	6010
Chromium	0.011	0.001	mg/L	04/11/12		EK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/11/12		LK	6010
Barium (Dissolved)	0.029	0.002	mg/L	04/11/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/11/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/11/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/11/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/12/12		RS	7470/E245.1
Lead	0.079	0.002	mg/L	04/11/12		EK	6010
Selenium	< 0.010	0.010	mg/L	04/11/12		EK	6010
Dissolved Metals Preparation	Completed			04/10/12		AG	SW846-3005
Total Metals Digestion	Completed			04/10/12		AG	
Extraction of CT ETPH	Completed			04/10/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/11/12		X/X	SW7470
Mercury Digestion	Completed			04/11/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/11/12		D/D	SW8151
PCB Extraction	Completed			04/10/12		T	SW3510C
Extraction for Pest (2 Liter)	Completed			04/10/12		T	SW3510
Semi-Volatile Extraction	Completed			04/10/12		F/K	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/12/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/12/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/12/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/12/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/12/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/12/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	04/12/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/12/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/12/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	80		%	04/12/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1221	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1232	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1242	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1248	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1254	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1260	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1262	ND	0.10	ug/L	04/11/12		AW	608/ 8082
PCB-1268	ND	0.10	ug/L	04/11/12		AW	608/ 8082
QA/QC Surrogates							
% DCBP	64		%	04/11/12		AW	30 - 150 %
% TCMX	71		%	04/11/12		AW	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDE	ND	0.1	ug/L	04/12/12		MR	SW8081
4,4' -DDT	ND	0.1	ug/L	04/12/12		MR	SW8081
a-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Alachlor	ND	0.1	ug/L	04/12/12		MR	SW8081
Aldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Chlordane	ND	0.3	ug/L	04/12/12		MR	SW8081
d-BHC	ND	0.05	ug/L	04/12/12		MR	SW8081
Dieldrin	ND	0.01	ug/L	04/12/12		MR	SW8081
Endosulfan I	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan II	ND	0.1	ug/L	04/12/12		MR	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/12/12		MR	SW8081
Endrin ketone	ND	0.1	ug/L	04/12/12		MR	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor	ND	0.05	ug/L	04/12/12		MR	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/12/12		MR	SW8081
Methoxychlor	ND	0.2	ug/L	04/12/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 GW

Phoenix I.D.: BB69757

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.5	ug/L	04/12/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	86		%	04/12/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	79		%	04/12/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/12/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/12/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/12/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/12/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/12/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/12/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/12/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/12/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/12/12		R/T	SW8260
Acetone	ND	25	ug/L	04/12/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/12/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/12/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/12/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/12/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/12/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/12/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/12/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/12/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/12/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/12/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/12/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/12/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/12/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/12/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/12/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/12/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/12/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/12/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/12/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/12/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/12/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/12/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/12/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/12/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/12/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/12/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/12/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/12/12		R/T	70 - 130 %
% Bromofluorobenzene	88		%	04/12/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	04/12/12		R/T	70 - 130 %
% Toluene-d8	96		%	04/12/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/11/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/11/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/11/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/11/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/11/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 GW

Phoenix I.D.: BB69757

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/11/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/11/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/11/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/11/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/11/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/11/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/11/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/11/12		DD	SW8270
Aniline	ND	10	ug/L	04/11/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/11/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
Benzidine	ND	50	ug/L	04/11/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/11/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/11/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/11/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/11/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/11/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/11/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/11/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/11/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/11/12		DD	SW8270
Phenol	ND	10	ug/L	04/11/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/11/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/11/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/11/12		DD	15 - 130 %
% Phenol-d5	68		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	115		%	04/11/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.16	0.040	ug/L	04/11/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 GW

Phoenix I.D.: BB69757

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.14	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.28	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/11/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.06	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	1.6	1.6	ug/L	04/11/12		DD	SW8270 (SIM)
Chrysene	0.17	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.02	0.010	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/11/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/11/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.12	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/11/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/11/12		DD	SW8270 (SIM)
Phenanthrene	0.25	0.050	ug/L	04/11/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/11/12		DD	15 - 130 %
% 2-Fluorobiphenyl	72		%	04/11/12		DD	15 - 130 %
% 2-Fluorophenol	69		%	04/11/12		DD	15 - 130 %
% Nitrobenzene-d5	82		%	04/11/12		DD	15 - 130 %
% Phenol-d5	68		%	04/11/12		DD	15 - 130 %
% Terphenyl-d14	115		%	04/11/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 18, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/09/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	04/10/12	15:49
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145-301-40				

Laboratory Data

SDG ID: GBB69754
Phoenix ID: BB69758

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-2

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/11/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Acetone	ND	25	ug/L	04/11/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-2

Phoenix I.D.: BB69758

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	04/11/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/11/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/11/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/11/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/11/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/11/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/11/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/11/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/11/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/11/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/11/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/11/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/11/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/11/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	04/11/12		R/T	70 - 130 %
% Bromofluorobenzene	88		%	04/11/12		R/T	70 - 130 %
% Dibromofluoromethane	98		%	04/11/12		R/T	70 - 130 %
% Toluene-d8	98		%	04/11/12		R/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB69758

Client ID: TB-2

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 18, 2012

Reviewed and Released by: Kathleen Cressia, QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 18, 2012

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 197980, QC Sample No: BB69343 (BB69754, BB69755, BB69756, BB69757)												
ICP Metals - Dissolved												
Arsenic	BDL	<0.004	<0.004	NC	95.2	94.8	0.4	98.2	94.0	4.4	75 - 125	20
Barium	BDL	0.005	0.005	NC	94.2	93.8	0.4	96.8	93.0	4.0	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	98.8	98.2	0.6	102	97.2	4.8	75 - 125	20
Chromium	BDL	<0.001	0.001	NC	94.8	94.5	0.3	98.1	93.5	4.8	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	97.2	96.5	0.7	100	95.6	4.5	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	91.9	91.7	0.2	95.0	91.4	3.9	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	91.4	90.9	0.5	94.4	90.0	4.8	75 - 125	20
QA/QC Batch 198074, QC Sample No: BB69782 (BB69754, BB69755, BB69756, BB69757)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.004	<0.004	NC	97.6	98.6	1.0	100	99.3	0.7	75 - 125	20
Barium	BDL	0.022	0.022	0	99.4	101	1.6	101	101	0.0	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	101	102	1.0	102	102	0.0	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	98.8	100	1.2	100	99.9	0.1	75 - 125	20
Lead	BDL	0.006	0.006	NC	99.3	101	1.7	101	100	1.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	94.5	95.3	0.8	96.8	96.1	0.7	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	94.4	95.9	1.6	96.2	95.2	1.0	75 - 125	20
QA/QC Batch 198194, QC Sample No: BB69835 (BB69754, BB69755, BB69756, BB69757)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	101	96.9	4.1	104	98.6	5.3	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 198292, QC Sample No: BB71141 (BB69755, BB69756)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	101	101	0.0	102	99.4	2.6	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 18, 2012

QA/QC Data

SDG I.D.: GBB69754

QA/QC Batch 198243, QC Sample No: BB61075 (BB69754, BB69755, BB69758)

Volatiles - Ground Water

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	118	119	0.8	123	121	1.6	70 - 130	30	
1,1,1-Trichloroethane	ND	95	96	1.0	101	95	6.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	102	99	3.0	106	107	0.9	70 - 130	30	
1,1,2-Trichloroethane	ND	91	92	1.1	94	95	1.1	70 - 130	30	
1,1-Dichloroethane	ND	89	90	1.1	94	90	4.3	70 - 130	30	
1,1-Dichloroethene	ND	86	90	4.5	102	96	6.1	70 - 130	30	
1,1-Dichloropropene	ND	93	95	2.1	102	100	2.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	89	92	3.3	87	94	7.7	70 - 130	30	
1,2,3-Trichloropropane	ND	94	92	2.2	95	98	3.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	91	92	1.1	92	97	5.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	105	1.0	106	105	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	87	94	7.7	82	94	13.6	70 - 130	30	
1,2-Dichlorobenzene	ND	95	97	2.1	101	103	2.0	70 - 130	30	
1,2-Dichloroethane	ND	92	90	2.2	96	97	1.0	70 - 130	30	
1,2-Dichloropropane	ND	89	91	2.2	96	91	5.3	70 - 130	30	
1,3,5-Trimethylbenzene	ND	102	104	1.9	106	102	3.8	70 - 130	30	
1,3-Dichlorobenzene	ND	97	99	2.0	101	103	2.0	70 - 130	30	
1,3-Dichloropropane	ND	95	95	0.0	99	100	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	92	95	3.2	99	97	2.0	70 - 130	30	
2,2-Dichloropropane	ND	91	90	1.1	79	75	5.2	70 - 130	30	
2-Chlorotoluene	ND	99	101	2.0	103	100	3.0	70 - 130	30	
2-Hexanone	ND	89	85	4.6	83	93	11.4	70 - 130	30	
2-Isopropyltoluene	ND	99	101	2.0	108	105	2.8	70 - 130	30	
4-Chlorotoluene	ND	97	99	2.0	106	103	2.9	70 - 130	30	
4-Methyl-2-pentanone	ND	85	84	1.2	81	87	7.1	70 - 130	30	
Acetone	ND	85	85	0.0	98	101	3.0	70 - 130	30	
Acrylonitrile	ND	92	91	1.1	94	94	0.0	70 - 130	30	
Benzene	ND	92	94	2.2	98	96	2.1	70 - 130	30	
Bromobenzene	ND	94	95	1.1	98	95	3.1	70 - 130	30	
Bromochloromethane	ND	97	96	1.0	102	101	1.0	70 - 130	30	
Bromodichloromethane	ND	99	97	2.0	111	102	8.5	70 - 130	30	
Bromoform	ND	118	116	1.7	127	129	1.6	70 - 130	30	
Bromomethane	ND	84	89	5.8	80	78	2.5	70 - 130	30	
Carbon Disulfide	ND	131	134	2.3	>150	>150	NC	70 - 130	30	l,m
Carbon tetrachloride	ND	99	102	3.0	106	105	0.9	70 - 130	30	
Chlorobenzene	ND	101	103	2.0	109	107	1.9	70 - 130	30	
Chloroethane	ND	84	86	2.4	101	92	9.3	70 - 130	30	
Chloroform	ND	92	93	1.1	96	92	4.3	70 - 130	30	
Chloromethane	ND	91	91	0.0	99	104	4.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	93	93	0.0	97	91	6.4	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	95	1.0	97	98	1.0	70 - 130	30	

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromochloromethane	ND	107	108	0.9	114	114	0.0	70 - 130	30	
Dibromoethane	ND	94	93	1.1	97	101	4.0	70 - 130	30	
Dibromomethane	ND	95	95	0.0	101	101	0.0	70 - 130	30	
Dichlorodifluoromethane	ND	81	83	2.4	114	100	13.1	70 - 130	30	
Ethylbenzene	ND	105	108	2.8	111	106	4.6	70 - 130	30	
Hexachlorobutadiene	ND	87	89	2.3	94	93	1.1	70 - 130	30	
Isopropylbenzene	ND	104	104	0.0	110	104	5.6	70 - 130	30	
m&p-Xylene	ND	101	104	2.9	108	102	5.7	70 - 130	30	
Methyl ethyl ketone	ND	83	86	3.6	82	82	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	96	95	1.0	89	93	4.4	70 - 130	30	
Methylene chloride	ND	80	82	2.5	86	83	3.6	70 - 130	30	
Naphthalene	ND	89	91	2.2	83	98	16.6	70 - 130	30	
n-Butylbenzene	ND	101	105	3.9	105	102	2.9	70 - 130	30	
n-Propylbenzene	ND	92	95	3.2	104	98	5.9	70 - 130	30	
o-Xylene	ND	100	102	2.0	107	105	1.9	70 - 130	30	
p-Isopropyltoluene	ND	107	109	1.9	107	105	1.9	70 - 130	30	
sec-Butylbenzene	ND	98	101	3.0	106	104	1.9	70 - 130	30	
Styrene	ND	97	97	0.0	104	104	0.0	70 - 130	30	
tert-Butylbenzene	ND	98	99	1.0	105	101	3.9	70 - 130	30	
Tetrachloroethene	ND	95	99	4.1	106	103	2.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	82	81	1.2	82	85	3.6	70 - 130	30	
Toluene	ND	93	95	2.1	98	97	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	90	91	1.1	98	95	3.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	103	102	1.0	101	102	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	107	4.6	93	104	11.2	70 - 130	30	
Trichloroethene	ND	96	98	2.1	105	99	5.9	70 - 130	30	
Trichlorofluoromethane	ND	100	104	3.9	106	97	8.9	70 - 130	30	
Trichlorotrifluoroethane	ND	84	89	5.8	101	92	9.3	70 - 130	30	
Vinyl chloride	ND	83	85	2.4	95	93	2.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	100	101	1.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	87	96	95	1.0	98	97	1.0	70 - 130	30	
% Dibromofluoromethane	96	101	100	1.0	101	99	2.0	70 - 130	30	
% Toluene-d8	97	96	96	0.0	96	97	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 197887, QC Sample No: BB62185 (BB69754, BB69755, BB69756, BB69757)

TPH by GC (Extractable Products) - Ground Water

Ext. Petroleum HC	ND	81	112	32.1	108	95	12.8	50 - 150	20	r
% n-Pentacosane	60	59	84	35.0	78	68	13.7	50 - 150	20	r

QA/QC Batch 197833, QC Sample No: BB62580 (BB69754, BB69755, BB69756, BB69757)

Chlorinated Herbicides - Ground Water

2,4,5-T	ND	121	97	22.0				40 - 140	20	r
2,4,5-TP (Silvex)	ND	102	95	7.1				40 - 140	20	
2,4-D	ND	107	105	1.9				40 - 140	20	
2,4-DB	ND	97	104	7.0				40 - 140	20	
Dalapon	ND	84	83	1.2				40 - 140	20	
Dicamba	ND	97	102	5.0				40 - 140	20	
Dichloroprop	ND	81	88	8.3				40 - 140	20	
Dinoseb	ND	67	67	0.0				40 - 140	20	
% DCAA (Surrogate Rec)	79	86	86	0.0				30 - 150	20	

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 197994, QC Sample No: BB63139 (BB69754, BB69755, BB69756, BB69757)									
Pesticides - Ground Water									
4,4' -DDD	ND	71	71	0.0				40 - 140	20
4,4' -DDE	ND	74	75	1.3				40 - 140	20
4,4' -DDT	ND	76	77	1.3				40 - 140	20
a-BHC	ND	73	72	1.4				40 - 140	20
a-Chlordane	ND	74	73	1.4				40 - 140	20
Alachlor	ND	N/A	N/A	NC				40 - 140	20
Aldrin	ND	70	68	2.9				40 - 140	20
b-BHC	ND	73	74	1.4				40 - 140	20
Chlordane	ND	N/A	N/A	NC				40 - 140	20
d-BHC	ND	75	75	0.0				40 - 140	20
Dieldrin	ND	75	75	0.0				40 - 140	20
Endosulfan I	ND	73	72	1.4				40 - 140	20
Endosulfan II	ND	75	76	1.3				40 - 140	20
Endosulfan sulfate	ND	75	74	1.3				40 - 140	20
Endrin	ND	77	79	2.6				40 - 140	20
Endrin aldehyde	ND	80	79	1.3				40 - 140	20
Endrin ketone	ND	76	77	1.3				40 - 140	20
g-BHC	ND	72	70	2.8				40 - 140	20
g-Chlordane	ND	73	73	0.0				40 - 140	20
Heptachlor	ND	71	72	1.4				40 - 140	20
Heptachlor epoxide	ND	71	71	0.0				40 - 140	20
Methoxychlor	ND	75	77	2.6				40 - 140	20
Toxaphene	ND	N/A	N/A	NC				40 - 140	20
% DCBP	79	78	80	2.5				30 - 150	20
% TCMX	72	70	73	4.2				30 - 150	20
QA/QC Batch 197995, QC Sample No: BB63377 (BB69754, BB69755, BB69756, BB69757)									
Polychlorinated Biphenyls - Ground Water									
PCB-1016	ND	94	81	14.9				40 - 140	20
PCB-1221	ND							40 - 140	20
PCB-1232	ND							40 - 140	20
PCB-1242	ND							40 - 140	20
PCB-1248	ND							40 - 140	20
PCB-1254	ND							40 - 140	20
PCB-1260	ND	80	68	16.2				40 - 140	20
PCB-1262	ND							40 - 140	20
PCB-1268	ND							40 - 140	20
% DCBP (Surrogate Rec)	101	99	86	14.1				30 - 150	20
% TCMX (Surrogate Rec)	96	100	89	11.6				30 - 150	20
QA/QC Batch 197977, QC Sample No: BB69447 (BB69754, BB69755, BB69756, BB69757)									
Semivolatiles - Ground Water									
1,2,4,5-Tetrachlorobenzene	ND	56	56	0.0				30 - 130	20
1,2,4-Trichlorobenzene	ND	71	71	0.0				30 - 130	20
1,2-Dichlorobenzene	ND	72	72	0.0				30 - 130	20
1,3-Dichlorobenzene	ND	70	70	0.0				30 - 130	20
1,4-Dichlorobenzene	ND	71	71	0.0				30 - 130	20
2,4,5-Trichlorophenol	ND	73	74	1.4				30 - 130	20
2,4,6-Trichlorophenol	ND	85	85	0.0				30 - 130	20
2,4-Dichlorophenol	ND	81	80	1.2				30 - 130	20
2,4-Dimethylphenol	ND	35	34	2.9				30 - 130	20

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrophenol	ND	21	27	25.0				30 - 130	20	l,r
2,4-Dinitrotoluene	ND	78	79	1.3				30 - 130	20	
2,6-Dinitrotoluene	ND	82	83	1.2				30 - 130	20	
2-Chloronaphthalene	ND	83	83	0.0				30 - 130	20	
2-Chlorophenol	ND	67	67	0.0				30 - 130	20	
2-Methylnaphthalene	ND	75	76	1.3				30 - 130	20	
2-Methylphenol (o-cresol)	ND	69	66	4.4				30 - 130	20	
2-Nitroaniline	ND	>150	>150	NC				30 - 130	20	l
2-Nitrophenol	ND	67	68	1.5				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	64	64	0.0				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	87	89	2.3				30 - 130	20	
4,6-Dinitro-2-methylphenol	ND	56	60	6.9				30 - 130	20	
4-Bromophenyl phenyl ether	ND	82	83	1.2				30 - 130	20	
4-Chloro-3-methylphenol	ND	84	85	1.2				30 - 130	20	
4-Chloroaniline	ND	43	40	7.2				30 - 130	20	
4-Chlorophenyl phenyl ether	ND	91	91	0.0				30 - 130	20	
4-Nitroaniline	ND	87	89	2.3				30 - 130	20	
4-Nitrophenol	ND	18	25	32.6				30 - 130	20	l,r
Acenaphthene	ND	83	84	1.2				30 - 130	20	
Acenaphthylene	ND	82	83	1.2				30 - 130	20	
Acetophenone	ND	49	49	0.0				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	82	83	1.2				30 - 130	20	
Azobenzene	ND	55	55	0.0				30 - 130	20	
Benz(a)anthracene	ND	85	85	0.0				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	80	80	0.0				30 - 130	20	
Benzo(b)fluoranthene	ND	85	85	0.0				30 - 130	20	
Benzo(ghi)perylene	ND	84	84	0.0				30 - 130	20	
Benzo(k)fluoranthene	ND	87	86	1.2				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	78	78	0.0				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	80	80	0.0				30 - 130	20	
Bis(2-chloroethyl)ether	ND	70	69	1.4				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	77	77	0.0				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	81	82	1.2				30 - 130	20	
Carbazole	ND	>150	>150	NC				30 - 130	20	l
Chrysene	ND	85	85	0.0				30 - 130	20	
Dibenz(a,h)anthracene	ND	81	82	1.2				30 - 130	20	
Dibenzofuran	ND	83	83	0.0				30 - 130	20	
Diethyl phthalate	ND	92	93	1.1				30 - 130	20	
Dimethylphthalate	ND	89	89	0.0				30 - 130	20	
Di-n-butylphthalate	ND	96	97	1.0				30 - 130	20	
Di-n-octylphthalate	ND	84	86	2.4				30 - 130	20	
Fluoranthene	ND	88	88	0.0				30 - 130	20	
Fluorene	ND	88	88	0.0				30 - 130	20	
Hexachlorobenzene	ND	88	87	1.1				30 - 130	20	
Hexachlorobutadiene	ND	74	73	1.4				30 - 130	20	
Hexachlorocyclopentadiene	ND	21	20	4.9				30 - 130	20	l
Hexachloroethane	ND	72	71	1.4				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	85	86	1.2				30 - 130	20	
Isophorone	ND	63	64	1.6				30 - 130	20	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Naphthalene	ND	78	78	0.0				30 - 130	20	
Nitrobenzene	ND	72	74	2.7				30 - 130	20	
N-Nitrosodimethylamine	ND	21	47	76.5				30 - 130	20	I,r
N-Nitrosodi-n-propylamine	ND	71	70	1.4				30 - 130	20	
N-Nitrosodiphenylamine	ND	98	97	1.0				30 - 130	20	
Pentachloronitrobenzene	ND	111	112	0.9				30 - 130	20	
Pentachlorophenol	ND	46	48	4.3				30 - 130	20	
Phenanthrene	ND	88	88	0.0				30 - 130	20	
Phenol	ND	58	59	1.7				30 - 130	20	
Pyrene	ND	90	90	0.0				30 - 130	20	
Pyridine	ND	<5	12	NC				30 - 130	20	I
% 2,4,6-Tribromophenol	99	77	76	1.3				15 - 130	20	
% 2-Fluorobiphenyl	71	74	74	0.0				30 - 130	20	
% 2-Fluorophenol	80	51	51	0.0				15 - 130	20	
% Nitrobenzene-d5	81	67	68	1.5				30 - 130	20	
% Phenol-d5	77	47	47	0.0				15 - 130	20	
% Terphenyl-d14	100	96	96	0.0				30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198309, QC Sample No: BB70237 (BB69757)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	120	123	2.5	123	117	5.0	70 - 130	30
1,1,1-Trichloroethane	ND	93	97	4.2	97	92	5.3	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	101	103	2.0	97	95	2.1	70 - 130	30
1,1,2-Trichloroethane	ND	88	90	2.2	88	86	2.3	70 - 130	30
1,1-Dichloroethane	ND	87	89	2.3	89	85	4.6	70 - 130	30
1,1-Dichloroethene	ND	87	91	4.5	96	89	7.6	70 - 130	30
1,1-Dichloropropene	ND	94	98	4.2	101	94	7.2	70 - 130	30
1,2,3-Trichlorobenzene	ND	87	91	4.5	80	83	3.7	70 - 130	30
1,2,3-Trichloropropane	ND	95	92	3.2	94	88	6.6	70 - 130	30
1,2,4-Trichlorobenzene	ND	88	95	7.7	87	87	0.0	70 - 130	30
1,2,4-Trimethylbenzene	ND	107	106	0.9	106	100	5.8	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	90	96	6.5	78	79	1.3	70 - 130	30
1,2-Dichlorobenzene	ND	96	97	1.0	98	95	3.1	70 - 130	30
1,2-Dichloroethane	ND	89	89	0.0	91	89	2.2	70 - 130	30
1,2-Dichloropropane	ND	87	86	1.2	87	84	3.5	70 - 130	30
1,3,5-Trimethylbenzene	ND	107	108	0.9	106	100	5.8	70 - 130	30
1,3-Dichlorobenzene	ND	97	99	2.0	99	97	2.0	70 - 130	30
1,3-Dichloropropane	ND	92	94	2.2	92	89	3.3	70 - 130	30
1,4-Dichlorobenzene	ND	93	93	0.0	95	94	1.1	70 - 130	30
2,2-Dichloropropane	ND	105	111	5.6	78	72	8.0	70 - 130	30
2-Chlorotoluene	ND	101	103	2.0	102	97	5.0	70 - 130	30
2-Hexanone	ND	90	87	3.4	79	83	4.9	70 - 130	30
2-Isopropyltoluene	ND	103	105	1.9	107	103	3.8	70 - 130	30
4-Chlorotoluene	ND	101	102	1.0	103	98	5.0	70 - 130	30
4-Methyl-2-pentanone	ND	81	84	3.6	76	76	0.0	70 - 130	30
Acetone	ND	95	90	5.4	92	92	0.0	70 - 130	30
Acrylonitrile	ND	88	89	1.1	85	86	1.2	70 - 130	30
Benzene	ND	92	94	2.2	96	91	5.3	70 - 130	30
Bromobenzene	ND	95	97	2.1	93	90	3.3	70 - 130	30
Bromochloromethane	ND	95	95	0.0	95	92	3.2	70 - 130	30

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromodichloromethane	ND	93	94	1.1	96	88	8.7	70 - 130	30	
Bromoform	ND	128	128	0.0	126	121	4.0	70 - 130	30	
Bromomethane	ND	86	93	7.8	86	89	3.4	70 - 130	30	
Carbon Disulfide	ND	143	148	3.4	147	139	5.6	70 - 130	30	l,m
Carbon tetrachloride	ND	102	104	1.9	109	99	9.6	70 - 130	30	
Chlorobenzene	ND	101	105	3.9	108	104	3.8	70 - 130	30	
Chloroethane	ND	86	77	11.0	94	89	5.5	70 - 130	30	
Chloroform	ND	88	92	4.4	91	86	5.6	70 - 130	30	
Chloromethane	ND	91	95	4.3	92	85	7.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	86	90	4.5	93	88	5.5	70 - 130	30	
cis-1,3-Dichloropropene	ND	97	99	2.0	90	86	4.5	70 - 130	30	
Dibromochloromethane	ND	103	108	4.7	105	102	2.9	70 - 130	30	
Dibromoethane	ND	92	94	2.2	92	90	2.2	70 - 130	30	
Dibromomethane	ND	94	94	0.0	93	91	2.2	70 - 130	30	
Dichlorodifluoromethane	ND	89	93	4.4	97	89	8.6	70 - 130	30	
Ethylbenzene	ND	110	112	1.8	112	109	2.7	70 - 130	30	
Hexachlorobutadiene	ND	85	94	10.1	90	89	1.1	70 - 130	30	
Isopropylbenzene	ND	107	109	1.9	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	106	107	0.9	110	104	5.6	70 - 130	30	
Methyl ethyl ketone	ND	78	>150	NC	77	75	2.6	70 - 130	30	l
Methyl t-butyl ether (MTBE)	ND	95	97	2.1	86	84	2.4	70 - 130	30	
Methylene chloride	ND	79	80	1.3	80	79	1.3	70 - 130	30	
Naphthalene	ND	91	92	1.1	75	84	11.3	70 - 130	30	
n-Butylbenzene	ND	104	107	2.8	103	101	2.0	70 - 130	30	
n-Propylbenzene	ND	98	99	1.0	104	96	8.0	70 - 130	30	
o-Xylene	ND	103	105	1.9	109	102	6.6	70 - 130	30	
p-Isopropyltoluene	ND	109	113	3.6	107	103	3.8	70 - 130	30	
sec-Butylbenzene	ND	103	106	2.9	108	101	6.7	70 - 130	30	
Styrene	ND	105	103	1.9	108	104	3.8	70 - 130	30	
tert-Butylbenzene	ND	101	103	2.0	103	98	5.0	70 - 130	30	
Tetrachloroethene	ND	98	106	7.8	103	95	8.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	81	82	1.2	75	77	2.6	70 - 130	30	
Toluene	ND	92	95	3.2	97	91	6.4	70 - 130	30	
trans-1,2-Dichloroethene	ND	90	92	2.2	94	90	4.3	70 - 130	30	
trans-1,3-Dichloropropene	ND	102	109	6.6	94	89	5.5	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	119	129	8.1	88	87	1.1	70 - 130	30	
Trichloroethene	ND	98	99	1.0	104	97	7.0	70 - 130	30	
Trichlorofluoromethane	ND	107	111	3.7	99	91	8.4	70 - 130	30	
Trichlorotrifluoroethane	ND	92	95	3.2	97	91	6.4	70 - 130	30	
Vinyl chloride	ND	86	90	4.5	90	84	6.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	100	100	0.0	101	98	3.0	70 - 130	30	
% Bromofluorobenzene	87	93	95	2.1	97	95	2.1	70 - 130	30	
% Dibromofluoromethane	96	98	100	2.0	100	100	0.0	70 - 130	30	
% Toluene-d8	97	95	95	0.0	95	95	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 198431, QC Sample No: BB70931 (BB69756)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	128	127	0.8	126	125	0.8	70 - 130	30	
1,1,1-Trichloroethane	ND	100	95	5.1	99	95	4.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	98	100	2.0	95	98	3.1	70 - 130	30	
1,1,2-Trichloroethane	ND	91	87	4.5	85	86	1.2	70 - 130	30	

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethane	ND	90	89	1.1	86	86	0.0	70 - 130	30	
1,1-Dichloroethene	ND	93	87	6.7	91	93	2.2	70 - 130	30	
1,1-Dichloropropene	ND	100	96	4.1	98	97	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	85	84	1.2	75	80	6.5	70 - 130	30	
1,2,3-Trichloropropane	ND	96	97	1.0	92	95	3.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	88	86	2.3	82	85	3.6	70 - 130	30	
1,2,4-Trimethylbenzene	ND	110	110	0.0	107	104	2.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	82	79	3.7	73	77	5.3	70 - 130	30	
1,2-Dichlorobenzene	ND	99	98	1.0	98	97	1.0	70 - 130	30	
1,2-Dichloroethane	ND	94	91	3.2	96	93	3.2	70 - 130	30	
1,2-Dichloropropane	ND	89	87	2.3	86	85	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	110	110	0.0	104	105	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	101	101	0.0	100	99	1.0	70 - 130	30	
1,3-Dichloropropane	ND	93	92	1.1	88	89	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	98	96	2.1	98	98	0.0	70 - 130	30	
2,2-Dichloropropane	ND	87	63	32.0	68	66	3.0	70 - 130	30	l,m,r
2-Chlorotoluene	ND	102	104	1.9	99	99	0.0	70 - 130	30	
2-Hexanone	ND	83	81	2.4	74	77	4.0	70 - 130	30	
2-Isopropyltoluene	ND	109	104	4.7	108	106	1.9	70 - 130	30	
4-Chlorotoluene	ND	101	103	2.0	103	103	0.0	70 - 130	30	
4-Methyl-2-pentanone	ND	80	76	5.1	75	76	1.3	70 - 130	30	
Acetone	ND	105	104	1.0	95	98	3.1	70 - 130	30	
Acrylonitrile	ND	86	82	4.8	83	82	1.2	70 - 130	30	
Benzene	ND	98	95	3.1	92	92	0.0	70 - 130	30	
Bromobenzene	ND	96	97	1.0	92	91	1.1	70 - 130	30	
Bromochloromethane	ND	98	93	5.2	94	93	1.1	70 - 130	30	
Bromodichloromethane	ND	97	95	2.1	98	94	4.2	70 - 130	30	
Bromoform	ND	135	135	0.0	144	142	1.4	70 - 130	30	l,m
Bromomethane	ND	96	91	5.3	80	91	12.9	70 - 130	30	
Carbon Disulfide	ND	150	133	12.0	139	140	0.7	70 - 130	30	l,m
Carbon tetrachloride	ND	110	105	4.7	109	108	0.9	70 - 130	30	
Chlorobenzene	ND	109	107	1.9	109	108	0.9	70 - 130	30	
Chloroethane	ND	93	89	4.4	89	90	1.1	70 - 130	30	
Chloroform	ND	94	93	1.1	92	90	2.2	70 - 130	30	
Chloromethane	ND	91	85	6.8	85	85	0.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	94	92	2.2	90	89	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	91	82	10.4	83	83	0.0	70 - 130	30	
Dibromochloromethane	ND	106	106	0.0	108	104	3.8	70 - 130	30	
Dibromoethane	ND	93	91	2.2	90	91	1.1	70 - 130	30	
Dibromomethane	ND	97	94	3.1	96	93	3.2	70 - 130	30	
Dichlorodifluoromethane	ND	97	86	12.0	93	90	3.3	70 - 130	30	
Ethylbenzene	ND	118	115	2.6	115	113	1.8	70 - 130	30	
Hexachlorobutadiene	ND	89	86	3.4	89	90	1.1	70 - 130	30	
Isopropylbenzene	ND	107	110	2.8	105	105	0.0	70 - 130	30	
m&p-Xylene	ND	112	111	0.9	113	111	1.8	70 - 130	30	
Methyl ethyl ketone	ND	80	80	0.0	77	78	1.3	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	73	70	4.2	64	67	4.6	70 - 130	30	m
Methylene chloride	ND	80	80	0.0	77	77	0.0	70 - 130	30	
Naphthalene	ND	83	81	2.4	63	76	18.7	70 - 130	30	m
n-Butylbenzene	ND	107	99	7.8	104	102	1.9	70 - 130	30	
n-Propylbenzene	ND	100	98	2.0	101	102	1.0	70 - 130	30	
o-Xylene	ND	113	111	1.8	111	111	0.0	70 - 130	30	
p-Isopropyltoluene	ND	113	112	0.9	106	105	0.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB69754

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
sec-Butylbenzene	ND	105	105	0.0	107	106	0.9	70 - 130	30
Styrene	ND	117	113	3.5	116	118	1.7	70 - 130	30
tert-Butylbenzene	ND	103	104	1.0	102	100	2.0	70 - 130	30
Tetrachloroethene	ND	104	100	3.9	102	100	2.0	70 - 130	30
Tetrahydrofuran (THF)	ND	76	74	2.7	71	74	4.1	70 - 130	30
Toluene	ND	97	95	2.1	93	91	2.2	70 - 130	30
trans-1,2-Dichloroethene	ND	94	91	3.2	91	90	1.1	70 - 130	30
trans-1,3-Dichloropropene	ND	91	85	6.8	87	85	2.3	70 - 130	30
trans-1,4-dichloro-2-butene	ND	83	78	6.2	75	76	1.3	70 - 130	30
Trichloroethene	ND	104	99	4.9	102	100	2.0	70 - 130	30
Trichlorofluoromethane	ND	118	106	10.7	99	97	2.0	70 - 130	30
Trichlorotrifluoroethane	ND	99	86	14.1	94	94	0.0	70 - 130	30
Vinyl chloride	ND	88	81	8.3	82	84	2.4	70 - 130	30
% 1,2-dichlorobenzene-d4	97	98	99	1.0	99	98	1.0	70 - 130	30
% Bromofluorobenzene	87	96	97	1.0	98	97	1.0	70 - 130	30
% Dibromofluoromethane	97	101	99	2.0	101	100	1.0	70 - 130	30
% Toluene-d8	95	94	93	1.1	94	94	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 18, 2012

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB69754, BB69755, BB69756, BB69757, BB69758

Sampling Date(s): 4/9/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, Herbicide Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☐ Yes ☑ No
5b.	Were these reporting limits met?	☐ Yes ☐ No ☑ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☑ Yes ☐ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Kathleen Cressia

Date: Wednesday, April 18, 2012

Printed Name: Kathleen Cressia

Position: QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

The client requested a shorter list of elements than the 6010 RCP list.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197887 (Samples: BB69754, BB69755, BB69756, BB69757): -----

One or more surrogates is outside of criteria. (% n-Pentacosane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Ext. Petroleum HC)

Instrument: Au-fid1 04/12/12-1 (BB69754, BB69755, BB69756, BB69757)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/12/2012

QC (Batch Specific)

---------- Sample No: BB62185, QA/QC Batch: 197887 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % n-Pentacosane(35.0%), Ext. Petroleum HC(32.1%)

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197833 (Samples: BB69754, BB69755, BB69756, BB69757): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (2,4,5-T)

Instrument: Au-ecd3 04/12/12-1 (BB69754, BB69755, BB69756, BB69757)

Initial Calibration ECD3-041012
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/12/2012

QC Comments: QC Batch 97833 04/06/12 (BB69754, BB69755, BB69756, BB69757)

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB62580, QA/QC Batch: 197833 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4,5-T(22.0%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/12/12-1 (BB69754, BB69755, BB69756, BB69757)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/12/2012

Instrument: Merlin 04/13/12-1 (BB69755, BB69756)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/13/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

QC (Batch Specific)

---------- Sample No: BB69835, QA/QC Batch: 198194 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB71141, QA/QC Batch: 198292 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 04/11/12-1 (BB69754, BB69755, BB69756, BB69757)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/11/2012

Instrument: Icp9 04/12/12-1 (BB69756, BB69757)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/12/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

QC (Batch Specific)

---------- Sample No: BB69343, QA/QC Batch: 197980 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

---------- Sample No: BB69782, QA/QC Batch: 198074 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd7 04/11/12-1 (BB69754, BB69755, BB69756, BB69757)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Adam Werner
Position: Chemist
Date: 4/11/2012

QC Comments: QC Batch 97995 04/09/12 (BB69754, BB69755, BB69756, BB69757)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB63377, QA/QC Batch: 197995 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/10/12-1 (BB69754, BB69755, BB69756, BB69757)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Mark Rochette
Position: Chemist
Date: 4/10/2012

QC Comments: QC Batch 97994 04/09/12 (BB69754, BB69755, BB69756, BB69757)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB63139, QA/QC Batch: 197994 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197977 (Samples: BB69754, BB69755, BB69756, BB69757): -----

One or more analytes is below the criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, 4-Nitrophenol, Hexachlorocyclopentadiene, N-Nitrosodimethylamine, Pyridine)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (2,4-Dinitrophenol, 4-Nitrophenol, N-Nitrosodimethylamine)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, Carbazole)

Instrument: Chem09 04/11/12-1 (BB69754, BB69755, BB69756, BB69757)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

Initial Calibration (Chem09/sv_0411):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 4-chloroaniline, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, 3,3'-dichlorobenzidine

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: 2-Nitrophenol, 3-Nitroaniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 4/11/2012

QC Comments: QC Batch 97977 04/09/12 (BB69754, BB69755, BB69756, BB69757)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB69447, QA/QC Batch: 197977 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(21%), 2-Nitroaniline(>150%), 4-Nitrophenol(18%), Carbazole(>150%), Hexachlorocyclopentadiene(21%), N-Nitrosodimethylamine(21%), Pyridine(<5%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(27%), 2-Nitroaniline(>150%), 4-Nitrophenol(25%), Carbazole(>150%), Hexachlorocyclopentadiene(20%), Pyridine(12%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4-Dinitrophenol(25.0%), 4-Nitrophenol(32.6%), N-Nitrosodimethylamine(76.5%)

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 04/11/12-1 (BB69754, BB69755, BB69756, BB69757)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0407):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: % 2,4,6-Tribromophenol, Atrazine, Pentachlorophenol

Printed Name Damien Drobinski
Position: Chemist
Date: 4/11/2012

Instrument: Chem04 04/16/12-1 (BB69754)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0416):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: None

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: None.

Printed Name Damien Drobinski
Position: Chemist
Date: 4/16/2012

QC Comments: QC Batch 97977 04/09/12 (BB69754, BB69755, BB69756, BB69757)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 198243 (Samples: BB69754, BB69755, BB69758): -----

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Carbon Disulfide)

QC Batch 198309 (Samples: BB69757): -----

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Carbon Disulfide, Methyl ethyl ketone)

QC Batch 198431 (Samples: BB69756): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (2,2-Dichloropropane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (2,2-Dichloropropane)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Carbon Disulfide)

Instrument: Chem08 04/11/12-1 (BB69754, BB69755, BB69758)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide

Printed Name Tina Covensky
Position: Chemist
Date: 4/11/2012

Instrument: Chem08 04/12/12-1 (BB69757)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide, Bromoform

Printed Name Tina Covensky
Position: Chemist
Date: 4/12/2012

Instrument: Chem08 04/13/12-1 (BB69756)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide, Bromoform

Printed Name Tina Covensky
Position: Chemist
Date: 4/13/2012

QC Comments: QC Batch 98243 04/12/12 (BB69754, BB69755, BB69758)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98309 04/13/12 (BB69757)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98431 04/16/12 (BB69756)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 18, 2012

SDG I.D.: GBB69754

QC (Batch Specific)

---------- Sample No: BB61075, QA/QC Batch: 198243 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(131%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(134%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB70237, QA/QC Batch: 198309 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(143%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(148%), Methyl ethyl ketone(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB70931, QA/QC Batch: 198431 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Bromoform(135%), Carbon Disulfide(150%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(63%), Bromoform(135%), Carbon Disulfide(133%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: 2,2-Dichloropropane(32.0%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MCI

Project #PO: 301-145, 301-40
Phone #: 860 2249141
Fax #: 860 2249147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-9-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pest + PCBs 8081A/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is ☒ HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
69754	GP-11 GW	GW	4-9-12	8:57am	X	X	X	X	X	X	X						3	6			2
69755	GP-20 GW	↓	↓	2:21pm	↓	↓	↓	↓	↓	↓	↓						3	6			2
69756	GP-21 GW	↓	↓	10:10am	↓	↓	↓	↓	↓	↓	↓						3	6			2
69757	GP-22 GW	↓	↓	11:15am	↓	↓	↓	↓	↓	↓	↓						3	6			2
69758	TB-2	↓	↓	-	↓												2				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/10/12	9:45
[signature]	Paradise	4/10/12	1549

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☒ Other General Permit Discharge Limits

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Tuesday, April 17, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB61071 - BB61076

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	14:10
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61071

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-69 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	0.003	0.001	mg/L	04/04/12		LK	6010
Arsenic	0.004	0.004	mg/L	04/04/12		LK	6010
Barium	0.047	0.002	mg/L	04/04/12		LK	6010
Cadmium	0.001	0.001	mg/L	04/04/12		LK	6010
Chromium	0.017	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.017	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.011	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/04/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-69 GW

Phoenix I.D.: BB61071

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/06/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/06/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	81		%	04/06/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/05/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/05/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	90		%	04/05/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1221	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1232	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1242	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1248	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1254	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1260	12	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1262	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1268	ND	1.0	ug/L	04/05/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	04/05/12		MH	30 - 150 %
% TCMX	Diluted Out		%	04/05/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDE	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDT	ND	1.0	ug/L	04/04/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/04/12		MR	SW8081
Aldrin	ND	0.015	ug/L	04/04/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/04/12		MR	SW8081
Chlordane	ND	1.5	ug/L	04/04/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Dieldrin	ND	0.40	ug/L	04/04/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/04/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/04/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin ketone	ND	0.5	ug/L	04/04/12		MR	SW8081
g-BHC (Lindane)	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor epoxide	ND	0.25	ug/L	04/04/12		MR	SW8081
Methoxychlor	ND	1.0	ug/L	04/04/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-69 GW

Phoenix I.D.: BB61071

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	5.0	ug/L	04/04/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	40		%	04/04/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	67		%	04/04/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Acetone	ND	25	ug/L	04/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	04/05/12		R/T	70 - 130 %
% Bromofluorobenzene	93		%	04/05/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	04/05/12		R/T	70 - 130 %
% Toluene-d8	100		%	04/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-69 GW

Phoenix I.D.: BB61071

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270
Aniline	ND	10	ug/L	04/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
Phenol	ND	10	ug/L	04/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	112		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	85		%	04/06/12		DD	15 - 130 %
% Phenol-d5	71		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	104		%	04/06/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthylene	0.08	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.21	0.040	ug/L	04/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-69 GW

Phoenix I.D.: BB61071

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.31	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.48	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.17	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	2	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Chrysene	0.27	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.05	0.010	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.29	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)
Phenanthrene	0.19	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	112		%	04/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	70		%	04/04/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/04/12		DD	15 - 130 %
% Nitrobenzene-d5	85		%	04/04/12		DD	15 - 130 %
% Phenol-d5	71		%	04/04/12		DD	15 - 130 %
% Terphenyl-d14	104		%	04/04/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference caused by the presence of PCB in the samples, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	12:41
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61072

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-71 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/06/12		LK	6010
Arsenic	0.039	0.004	mg/L	04/04/12		LK	6010
Barium	0.354	0.002	mg/L	04/04/12		LK	6010
Cadmium	0.006	0.001	mg/L	04/04/12		LK	6010
Chromium	0.082	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.031	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.112	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/04/12		F/K	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-71 GW

Phoenix I.D.: BB61072

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/06/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/06/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	48		%	04/06/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	0.092	0.070	mg/L	04/05/12		JRB	CTETPH/8015DRO
Identification	**		mg/L	04/05/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	87		%	04/05/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1221	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1232	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1242	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1248	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1254	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1260	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1262	ND	0.50	ug/L	04/05/12		MH	608/ 8082
PCB-1268	*	0.50	ug/L	04/05/12		MH	608/ 8082
Total PCBs	2.6	0.50	ug/L	04/05/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	04/05/12		MH	30 - 150 %
% TCMX	Diluted Out		%	04/05/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDE	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDT	ND	0.5	ug/L	04/04/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/04/12		MR	SW8081
Aldrin	ND	0.015	ug/L	04/04/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/04/12		MR	SW8081
Chlordane	ND	1.5	ug/L	04/04/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Dieldrin	ND	0.020	ug/L	04/04/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/04/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/04/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin ketone	ND	0.5	ug/L	04/04/12		MR	SW8081
g-BHC (Lindane)	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor epoxide	ND	0.25	ug/L	04/04/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-71 GW

Phoenix I.D.: BB61072

Parameter	Result	RL	Units	Date	Time	By	Reference
Methoxychlor	ND	1.0	ug/L	04/04/12		MR	SW8081
Toxaphene	ND	5.0	ug/L	04/04/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	103		%	04/04/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	68		%	04/04/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	8.0	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	1.6	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Acetone	ND	25	ug/L	04/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chlorobenzene	1.1	1.0	ug/L	04/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-71 GW

Phoenix I.D.: BB61072

Parameter	Result	RL	Units	Date	Time	By	Reference
Dichlorodifluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/05/12		R/T	SW8260
Isopropylbenzene	11	1.0	ug/L	04/05/12		R/T	SW8260
m&p-Xylene	29	1.0	ug/L	04/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Propylbenzene	4.4	1.0	ug/L	04/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Total Xylenes	29	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/05/12		R/T	70 - 130 %
% Bromofluorobenzene	97		%	04/05/12		R/T	70 - 130 %
% Dibromofluoromethane	97		%	04/05/12		R/T	70 - 130 %
% Toluene-d8	126		%	04/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270

Parameter	Result	RL	Units	Date	Time	By	Reference	
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270	
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270	
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270	
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270	
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270	
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270	
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270	
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270	
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270	
Aniline	ND	10	ug/L	04/06/12		DD	SW8270	
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270	
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270	
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270	
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270	
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270	
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270	
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270	
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270	
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270	
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270	
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270	
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270	
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270	
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270	
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270	
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270	
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270	
Phenol	ND	10	ug/L	04/06/12		DD	SW8270	
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270	
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	116		%	04/06/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	69		%	04/06/12		DD	15 - 130 %	
% 2-Fluorophenol	78		%	04/06/12		DD	15 - 130 %	
% Nitrobenzene-d5	84		%	04/06/12		DD	15 - 130 %	
% Phenol-d5	76		%	04/06/12		DD	15 - 130 %	
% Terphenyl-d14	131		%	04/06/12		DD	15 - 130 %	3
Semivolatiles								
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)	
Acenaphthene	0.44	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Acenaphthylene	0.27	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-71 GW

Phoenix I.D.: BB61072

Parameter	Result	RL	Units	Date	Time	By	Reference	
Benz(a)anthracene	0.38	0.040	ug/L	04/04/12		DD	SW8270 (SIM)	
Benzo(a)pyrene	0.36	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Benzo(b)fluoranthene	0.51	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)	
Benzo(k)fluoranthene	0.13	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Bis(2-ethylhexyl)phthalate	1.8	1.6	ug/L	04/04/12		DD	SW8270 (SIM)	
Chrysene	0.4	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Dibenz(a,h)anthracene	0.06	0.010	ug/L	04/04/12		DD	SW8270 (SIM)	
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)	
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)	
Indeno(1,2,3-cd)pyrene	0.32	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)	
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)	
Phenanthrene	1.1	0.050	ug/L	04/04/12		DD	SW8270 (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	116		%	04/04/12		DD	15 - 130 %	
% 2-Fluorobiphenyl	69		%	04/04/12		DD	15 - 130 %	
% 2-Fluorophenol	78		%	04/04/12		DD	15 - 130 %	
% Nitrobenzene-d5	84		%	04/04/12		DD	15 - 130 %	
% Phenol-d5	76		%	04/04/12		DD	15 - 130 %	
% Terphenyl-d14	131		%	04/04/12		DD	15 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

Comments:

* For PCBs, as per section 11.9.3, when weathering of PCBs is present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles aroclor 1268.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C18 range. The sample was quantitated against a C9-C36 standard.

* For Pesticides, due to matrix interference caused by the presence of PCB in the samples, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	11:02
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61073

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-73 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium	0.057	0.002	mg/L	04/04/12		LK	6010
Cadmium	0.003	0.001	mg/L	04/04/12		LK	6010
Chromium	0.002	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.046	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.004	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/05/12		F/K/D	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/06/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/06/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	74		%	04/06/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	0.21	0.070	mg/L	04/09/12		JRB	CTETPH/8015DRO
Identification	**		mg/L	04/09/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	77		%	04/09/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1221	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1232	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1242	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1248	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1254	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1260	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1262	ND	1.0	ug/L	04/05/12		MH	608/ 8082
PCB-1268	*	1.0	ug/L	04/05/12		MH	608/ 8082
Total PCBs	4.1	1.0	ug/L	04/05/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	04/05/12		MH	30 - 150 %
% TCMX	Diluted Out		%	04/05/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDE	ND	0.5	ug/L	04/04/12		MR	SW8081
4,4' -DDT	ND	0.5	ug/L	04/04/12		MR	SW8081
a-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Alachlor	ND	0.5	ug/L	04/04/12		MR	SW8081
Aldrin	ND	0.015	ug/L	04/04/12		MR	SW8081
b-BHC	ND	0.05	ug/L	04/04/12		MR	SW8081
Chlordane	ND	1.5	ug/L	04/04/12		MR	SW8081
d-BHC	ND	0.25	ug/L	04/04/12		MR	SW8081
Dieldrin	ND	0.020	ug/L	04/04/12		MR	SW8081
Endosulfan I	ND	0.25	ug/L	04/04/12		MR	SW8081
Endosulfan II	ND	0.5	ug/L	04/04/12		MR	SW8081
Endosulfan Sulfate	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin Aldehyde	ND	0.5	ug/L	04/04/12		MR	SW8081
Endrin ketone	ND	0.70	ug/L	04/04/12		MR	SW8081
g-BHC (Lindane)	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor	ND	0.25	ug/L	04/04/12		MR	SW8081
Heptachlor epoxide	ND	0.25	ug/L	04/04/12		MR	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-73 GW

Phoenix I.D.: BB61073

Parameter	Result	RL	Units	Date	Time	By	Reference
Methoxychlor	ND	1.0	ug/L	04/04/12		MR	SW8081
Toxaphene	ND	5.0	ug/L	04/04/12		MR	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	04/04/12		MR	30 - 150 %
%TCMX (Surrogate Rec)	77		%	04/04/12		MR	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	1.6	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Acetone	ND	25	ug/L	04/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dichlorodifluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Ethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/05/12		R/T	SW8260
Isopropylbenzene	1.2	1.0	ug/L	04/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/05/12		R/T	70 - 130 %
% Bromofluorobenzene	95		%	04/05/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	04/05/12		R/T	70 - 130 %
% Toluene-d8	111		%	04/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270

Parameter	Result	RL	Units	Date	Time	By	Reference
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270
Aniline	ND	10	ug/L	04/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
Phenol	ND	10	ug/L	04/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	109		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	65		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/06/12		DD	15 - 130 %
% Phenol-d5	58		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	74		%	04/06/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthene	0.47	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthylene	0.19	0.050	ug/L	04/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-73 GW

Phoenix I.D.: BB61073

Parameter	Result	RL	Units	Date	Time	By	Reference
Benz(a)anthracene	0.52	0.040	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(a)pyrene	0.31	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.59	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.17	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	1.8	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Chrysene	0.6	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.08	0.010	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.41	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)
Phenanthrene	1.9	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	109		%	04/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	65		%	04/04/12		DD	15 - 130 %
% 2-Fluorophenol	77		%	04/04/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/04/12		DD	15 - 130 %
% Phenol-d5	58		%	04/04/12		DD	15 - 130 %
% Terphenyl-d14	74		%	04/04/12		DD	15 - 130 %

Comments:

* For PCBs, as per section 11.9.3, when weathering of PCBs is present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles aroclor 1268.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

* For Pesticides, due to matrix interference caused by the presence of PCB in the samples, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	9:11
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61074

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-77 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic	0.007	0.004	mg/L	04/04/12		LK	6010
Barium	0.054	0.002	mg/L	04/04/12		LK	6010
Cadmium	0.002	0.001	mg/L	04/04/12		LK	6010
Chromium	0.021	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.008	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.030	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/05/12		F/K/D	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dicamba	ND	2.6	ug/L	04/06/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dinoseb	ND	2.6	ug/L	04/06/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	87		%	04/06/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/09/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/09/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	82		%	04/09/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/04/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	33		%	04/04/12		MH	30 - 150 %
% TCMX	65		%	04/04/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/04/12		M/P	SW8081
4,4' -DDE	ND	0.1	ug/L	04/04/12		M/P	SW8081
4,4' -DDT	ND	0.1	ug/L	04/04/12		M/P	SW8081
a-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081
Alachlor	ND	0.1	ug/L	04/04/12		M/P	SW8081
Aldrin	ND	0.003	ug/L	04/04/12		M/P	SW8081
b-BHC	ND	0.01	ug/L	04/04/12		M/P	SW8081
Chlordane	ND	0.3	ug/L	04/04/12		M/P	SW8081
d-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081
Dieldrin	ND	0.002	ug/L	04/04/12		M/P	SW8081
Endosulfan I	ND	0.05	ug/L	04/04/12		M/P	SW8081
Endosulfan II	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin ketone	ND	0.1	ug/L	04/04/12		M/P	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/04/12		M/P	SW8081
Heptachlor	ND	0.05	ug/L	04/04/12		M/P	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/04/12		M/P	SW8081
Methoxychlor	ND	0.2	ug/L	04/04/12		M/P	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-77 GW

Phoenix I.D.: BB61074

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/04/12		M/P	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	39		%	04/04/12		M/P	30 - 150 %
%TCMX (Surrogate Rec)	69		%	04/04/12		M/P	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	04/05/12		R/P	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,2-Dichloroethane	ND	0.6	ug/L	04/05/12		R/P	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/05/12		R/P	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/P	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/P	SW8260
2-Hexanone	ND	5	ug/L	04/05/12		R/P	SW8260
2-Isopropyltoluene	ND	1	ug/L	04/05/12		R/P	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/P	SW8260
4-Methyl-2-pentanone	ND	5	ug/L	04/05/12		R/P	SW8260
Acetone	ND	25	ug/L	04/05/12		R/P	SW8260
Acrylonitrile	ND	5	ug/L	04/05/12		R/P	SW8260
Benzene	ND	0.7	ug/L	04/05/12		R/P	SW8260
Bromobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Bromochloromethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Bromodichloromethane	ND	0.5	ug/L	04/05/12		R/P	SW8260
Bromoform	ND	1.0	ug/L	04/05/12		R/P	SW8260
Bromomethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Carbon Disulfide	ND	5	ug/L	04/05/12		R/P	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/05/12		R/P	SW8260
Chlorobenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Chloroethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Chloroform	ND	1.0	ug/L	04/05/12		R/P	SW8260
Chloromethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/P	SW8260
cis-1,3-Dichloropropene	ND	0.5	ug/L	04/05/12		R/P	SW8260
Dibromochloromethane	ND	0.5	ug/L	04/05/12		R/P	SW8260
Dibromoethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Dibromomethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/05/12		R/P	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Hexachlorobutadiene	ND	0.4	ug/L	04/05/12		R/P	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
m&p-Xylene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Methyl ethyl ketone	ND	5	ug/L	04/05/12		R/P	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/05/12		R/P	SW8260
Methylene chloride	ND	1.0	ug/L	04/05/12		R/P	SW8260
Naphthalene	ND	1.0	ug/L	04/05/12		R/P	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
o-Xylene	ND	1.0	ug/L	04/05/12		R/P	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/P	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Styrene	ND	1.0	ug/L	04/05/12		R/P	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Tetrahydrofuran (THF)	ND	5	ug/L	04/05/12		R/P	SW8260
Toluene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Total Xylenes	ND	2.0	ug/L	04/05/12		R/P	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/P	SW8260
trans-1,3-Dichloropropene	ND	0.5	ug/L	04/05/12		R/P	SW8260
trans-1,4-dichloro-2-butene	ND	5	ug/L	04/05/12		R/P	SW8260
Trichloroethene	ND	1.0	ug/L	04/05/12		R/P	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/05/12		R/P	SW8260
Trichlorotrifluoroethane	ND	1	ug/L	04/05/12		R/P	SW8260
Vinyl chloride	ND	1.0	ug/L	04/05/12		R/P	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	04/05/12		R/P	70 - 130 %
% Bromofluorobenzene	91		%	04/05/12		R/P	70 - 130 %
% Dibromofluoromethane	94		%	04/05/12		R/P	70 - 130 %
% Toluene-d8	97		%	04/05/12		R/P	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-77 GW

Phoenix I.D.: BB61074

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270
Aniline	ND	10	ug/L	04/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
Phenol	ND	10	ug/L	04/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	61		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/06/12		DD	15 - 130 %
% Phenol-d5	66		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/06/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.21	0.040	ug/L	04/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-77 GW

Phoenix I.D.: BB61074

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.3	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	0.66	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.16	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	6	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Chrysene	0.4	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.07	0.010	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	0.43	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)
Phenanthrene	0.25	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	61		%	04/04/12		DD	15 - 130 %
% 2-Fluorophenol	68		%	04/04/12		DD	15 - 130 %
% Nitrobenzene-d5	83		%	04/04/12		DD	15 - 130 %
% Phenol-d5	66		%	04/04/12		DD	15 - 130 %
% Terphenyl-d14	99		%	04/04/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	7:51
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61075

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-79 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic	0.014	0.004	mg/L	04/04/12		LK	6010
Barium	0.165	0.002	mg/L	04/04/12		LK	6010
Cadmium	0.001	0.001	mg/L	04/04/12		LK	6010
Chromium	0.055	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.011	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	0.002	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.086	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/05/12		F/K/D	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference	
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151	
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151	
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151	
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151	
Dicamba	ND	2.6	ug/L	04/06/12		JRB	SW8151	
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151	
Dinoseb	ND	2.6	ug/L	04/06/12		JRB	SW8151	
QA/QC Surrogates								
% DCAA	39		%	04/06/12		JRB	30 - 150 %	
TPH by GC (Extractable Products)								
Ext. Petroleum HC	ND	0.070	mg/L	04/09/12		JRB	CTETPH/8015DRO	
Identification	ND		mg/L	04/09/12		JRB	CTETPH/8015DRO	
QA/QC Surrogates								
% n-Pentacosane	28		%	04/09/12		JRB	50 - 150 %	3
Polychlorinated Biphenyls								
PCB-1016	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1221	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1232	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1242	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1248	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1254	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1260	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1262	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
PCB-1268	ND	0.10	ug/L	04/04/12		MH	608/ 8082	
QA/QC Surrogates								
% DCBP	58		%	04/04/12		MH	30 - 150 %	
% TCMX	55		%	04/04/12		MH	30 - 150 %	
Pesticides								
4,4' -DDD	ND	0.1	ug/L	04/04/12		M/P	SW8081	
4,4' -DDE	ND	0.1	ug/L	04/04/12		M/P	SW8081	
4,4' -DDT	ND	0.1	ug/L	04/04/12		M/P	SW8081	
a-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Alachlor	ND	0.1	ug/L	04/04/12		M/P	SW8081	
Aldrin	ND	0.003	ug/L	04/04/12		M/P	SW8081	
b-BHC	ND	0.01	ug/L	04/04/12		M/P	SW8081	
Chlordane	ND	0.3	ug/L	04/04/12		M/P	SW8081	
d-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Dieldrin	ND	0.002	ug/L	04/04/12		M/P	SW8081	
Endosulfan I	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Endosulfan II	ND	0.1	ug/L	04/04/12		M/P	SW8081	
Endosulfan Sulfate	ND	0.1	ug/L	04/04/12		M/P	SW8081	
Endrin	ND	0.1	ug/L	04/04/12		M/P	SW8081	
Endrin Aldehyde	ND	0.1	ug/L	04/04/12		M/P	SW8081	
Endrin ketone	ND	0.1	ug/L	04/04/12		M/P	SW8081	
g-BHC (Lindane)	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Heptachlor	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Heptachlor epoxide	ND	0.05	ug/L	04/04/12		M/P	SW8081	
Methoxychlor	ND	0.2	ug/L	04/04/12		M/P	SW8081	

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-79 GW

Phoenix I.D.: BB61075

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/04/12		M/P	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	50		%	04/04/12		M/P	30 - 150 %
%TCMX (Surrogate Rec)	90		%	04/04/12		M/P	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/11/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/11/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/11/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/11/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/11/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/11/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/11/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/11/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/11/12		H/T	SW8260
Acetone	ND	25	ug/L	04/11/12		H/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/11/12		H/T	SW8260
Benzene	ND	0.70	ug/L	04/11/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/11/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	04/11/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/11/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/11/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	04/11/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/11/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/11/12		H/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/11/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/11/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/11/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/11/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	04/11/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	04/11/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/11/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Styrene	ND	1.0	ug/L	04/11/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/11/12		H/T	SW8260
Toluene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/11/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/11/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/11/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/11/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/11/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/11/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/11/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/11/12		H/T	70 - 130 %
% Bromofluorobenzene	87		%	04/11/12		H/T	70 - 130 %
% Dibromofluoromethane	100		%	04/11/12		H/T	70 - 130 %
% Toluene-d8	80		%	04/11/12		H/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-79 GW

Phoenix I.D.: BB61075

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270
Aniline	ND	10	ug/L	04/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
Phenol	ND	10	ug/L	04/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	59		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	04/06/12		DD	15 - 130 %
% Phenol-d5	72		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/06/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.55	0.040	ug/L	04/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-79 GW

Phoenix I.D.: BB61075

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	0.95	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	2.1	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.51	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	10	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Chrysene	1.2	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.25	0.010	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	1.4	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)
Phenanthrene	0.72	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	114		%	04/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	59		%	04/04/12		DD	15 - 130 %
% 2-Fluorophenol	71		%	04/04/12		DD	15 - 130 %
% Nitrobenzene-d5	81		%	04/04/12		DD	15 - 130 %
% Phenol-d5	72		%	04/04/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/04/12		DD	15 - 130 %

3 = This parameter exceeds laboratory specified limits.

Comments:

* For extractable total petroleum hydrocarbon, poor surrogate recovery was observed. Insufficient sample for re-extraction.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

April 17, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		04/02/12	6:39
Location Code:	MAGU-DAS	Received by:	LB	04/03/12	14:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	301-145 & 301-40				

Laboratory Data

SDG ID: GBB61071
Phoenix ID: BB61076

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-81 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium	0.020	0.002	mg/L	04/04/12		LK	6010
Cadmium	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium	0.008	0.001	mg/L	04/04/12		LK	6010
Silver (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Arsenic (Dissolved)	< 0.004	0.004	mg/L	04/04/12		LK	6010
Barium (Dissolved)	0.006	0.002	mg/L	04/04/12		LK	6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	04/04/12		LK	6010
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead (Dissolved)	< 0.002	0.002	mg/L	04/04/12		LK	6010
Selenium (Dissolved)	< 0.011	0.011	mg/L	04/04/12		LK	6010
Mercury	< 0.0002	0.0002	mg/L	04/04/12		RS	7470/E245.1
Lead	0.019	0.002	mg/L	04/04/12		LK	6010
Selenium	< 0.010	0.010	mg/L	04/04/12		LK	6010
Dissolved Metals Preparation	Completed			04/03/12		AG	SW846-3005
Total Metals Digestion	Completed			04/03/12		AG	
Extraction of CT ETPH	Completed			04/05/12		F/K/D	3510/3520
Dissolved Mercury Digestion	Completed			04/04/12		X/X	SW7470
Mercury Digestion	Completed			04/04/12		X/X	7471/245.1
Extraction for Herbicide	Completed			04/04/12		D/DK	SW8151
PCB Extraction	Completed			04/03/12		L	SW3510C
Extraction for Pest (2 Liter)	Completed			04/03/12		L	SW3510
Semi-Volatile Extraction	Completed			04/03/12		F/D	SW3520
Chlorinated Herbicides							
2,4,5-T	ND	1.3	ug/L	04/06/12		JRB	SW8151

Parameter	Result	RL	Units	Date	Time	By	Reference
2,4,5-TP (Silvex)	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-D	ND	1.3	ug/L	04/06/12		JRB	SW8151
2,4-DB	ND	13	ug/L	04/06/12		JRB	SW8151
Dalapon	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dicamba	ND	2.5	ug/L	04/06/12		JRB	SW8151
Dichloroprop	ND	1.3	ug/L	04/06/12		JRB	SW8151
Dinoseb	ND	2.5	ug/L	04/06/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	92		%	04/06/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	0.070	mg/L	04/06/12		JRB	CTETPH/8015DRO
Identification	ND		mg/L	04/06/12		JRB	CTETPH/8015DRO
QA/QC Surrogates							
% n-Pentacosane	54		%	04/06/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1221	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1232	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1242	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1248	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1254	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1260	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1262	ND	0.10	ug/L	04/04/12		MH	608/ 8082
PCB-1268	ND	0.10	ug/L	04/04/12		MH	608/ 8082
QA/QC Surrogates							
% DCBP	30		%	04/04/12		MH	30 - 150 %
% TCMX	51		%	04/04/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	0.1	ug/L	04/04/12		M/P	SW8081
4,4' -DDE	ND	0.1	ug/L	04/04/12		M/P	SW8081
4,4' -DDT	ND	0.1	ug/L	04/04/12		M/P	SW8081
a-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081
Alachlor	ND	0.1	ug/L	04/04/12		M/P	SW8081
Aldrin	ND	0.003	ug/L	04/04/12		M/P	SW8081
b-BHC	ND	0.01	ug/L	04/04/12		M/P	SW8081
Chlordane	ND	0.3	ug/L	04/04/12		M/P	SW8081
d-BHC	ND	0.05	ug/L	04/04/12		M/P	SW8081
Dieldrin	ND	0.002	ug/L	04/04/12		M/P	SW8081
Endosulfan I	ND	0.05	ug/L	04/04/12		M/P	SW8081
Endosulfan II	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endosulfan Sulfate	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin Aldehyde	ND	0.1	ug/L	04/04/12		M/P	SW8081
Endrin ketone	ND	0.1	ug/L	04/04/12		M/P	SW8081
g-BHC (Lindane)	ND	0.05	ug/L	04/04/12		M/P	SW8081
Heptachlor	ND	0.05	ug/L	04/04/12		M/P	SW8081
Heptachlor epoxide	ND	0.05	ug/L	04/04/12		M/P	SW8081
Methoxychlor	ND	0.2	ug/L	04/04/12		M/P	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-81 GW

Phoenix I.D.: BB61076

Parameter	Result	RL	Units	Date	Time	By	Reference
Toxaphene	ND	1.0	ug/L	04/04/12		M/P	SW8081
QA/QC Surrogates							
%DCBP (Surrogate Rec)	97		%	04/04/12		M/P	30 - 150 %
%TCMX (Surrogate Rec)	115		%	04/04/12		M/P	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	04/05/12		R/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
2-Hexanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Acetone	ND	25	ug/L	04/05/12		R/T	SW8260
Acrylonitrile	ND	5.0	ug/L	04/05/12		R/T	SW8260
Benzene	ND	0.70	ug/L	04/05/12		R/T	SW8260
Bromobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromochloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Bromoform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Bromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	04/05/12		R/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chlorobenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloroform	ND	1.0	ug/L	04/05/12		R/T	SW8260
Chloromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	04/05/12		R/T	SW8260
Dibromoethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dibromomethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Ethylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	04/05/12		R/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
m&p-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	04/05/12		R/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	04/05/12		R/T	SW8260
Methylene chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
Naphthalene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
o-Xylene	ND	1.0	ug/L	04/05/12		R/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Styrene	ND	1.0	ug/L	04/05/12		R/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	04/05/12		R/T	SW8260
Toluene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Total Xylenes	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	04/05/12		R/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	04/05/12		R/T	SW8260
Trichloroethene	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	04/05/12		R/T	SW8260
Vinyl chloride	ND	1.0	ug/L	04/05/12		R/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	04/05/12		R/T	70 - 130 %
% Bromofluorobenzene	90		%	04/05/12		R/T	70 - 130 %
% Dibromofluoromethane	96		%	04/05/12		R/T	70 - 130 %
% Toluene-d8	82		%	04/05/12		R/T	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,2-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,3-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
1,4-Dichlorobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,4,5-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4,6-Trichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dichlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dimethylphenol	ND	10	ug/L	04/06/12		DD	SW8270
2,4-Dinitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
2,4-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2,6-Dinitrotoluene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chloronaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Chlorophenol	ND	10	ug/L	04/06/12		DD	SW8270
2-Methylnaphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
2-Methylphenol (o-cresol)	ND	10	ug/L	04/06/12		DD	SW8270
2-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
2-Nitrophenol	ND	10	ug/L	04/06/12		DD	SW8270
3&4-Methylphenol (m&p-cresol)	ND	10	ug/L	04/06/12		DD	SW8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-81 GW

Phoenix I.D.: BB61076

Parameter	Result	RL	Units	Date	Time	By	Reference
3,3'-Dichlorobenzidine	ND	50	ug/L	04/06/12		DD	SW8270
3-Nitroaniline	ND	50	ug/L	04/06/12		DD	SW8270
4,6-Dinitro-2-methylphenol	ND	50	ug/L	04/06/12		DD	SW8270
4-Bromophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Chloro-3-methylphenol	ND	20	ug/L	04/06/12		DD	SW8270
4-Chloroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	04/06/12		DD	SW8270
4-Nitroaniline	ND	20	ug/L	04/06/12		DD	SW8270
4-Nitrophenol	ND	50	ug/L	04/06/12		DD	SW8270
Acetophenone	ND	5.0	ug/L	04/06/12		DD	SW8270
Aniline	ND	10	ug/L	04/06/12		DD	SW8270
Anthracene	ND	5.0	ug/L	04/06/12		DD	SW8270
Azobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
Benzidine	ND	50	ug/L	04/06/12		DD	SW8270
Benzoic acid	ND	50	ug/L	04/06/12		DD	SW8270
Benzyl butyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethoxy)methane	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroethyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	04/06/12		DD	SW8270
Carbazole	ND	5.0	ug/L	04/06/12		DD	SW8270
Dibenzofuran	ND	5.0	ug/L	04/06/12		DD	SW8270
Diethyl phthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Dimethylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-butylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Di-n-octylphthalate	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluoranthene	ND	5.0	ug/L	04/06/12		DD	SW8270
Fluorene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorobutadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Hexachlorocyclopentadiene	ND	5.0	ug/L	04/06/12		DD	SW8270
Isophorone	ND	5.0	ug/L	04/06/12		DD	SW8270
Naphthalene	ND	5.0	ug/L	04/06/12		DD	SW8270
Nitrobenzene	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodimethylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodi-n-propylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
N-Nitrosodiphenylamine	ND	5.0	ug/L	04/06/12		DD	SW8270
Phenol	ND	10	ug/L	04/06/12		DD	SW8270
Pyrene	ND	5.0	ug/L	04/06/12		DD	SW8270
Pyridine	ND	5.0	ug/L	04/06/12		DD	SW8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	120		%	04/06/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/06/12		DD	15 - 130 %
% 2-Fluorophenol	78		%	04/06/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	04/06/12		DD	15 - 130 %
% Phenol-d5	77		%	04/06/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/06/12		DD	15 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Acenaphthylene	ND	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benz(a)anthracene	0.78	0.040	ug/L	04/04/12		DD	SW8270 (SIM)

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Phoenix I.D.: BB61076

Client ID: GP-81 GW

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(a)pyrene	1.1	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(b)fluoranthene	2.2	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(ghi)perylene	ND	3.0	ug/L	04/04/12		DD	SW8270 (SIM)
Benzo(k)fluoranthene	0.61	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Bis(2-ethylhexyl)phthalate	3.9	1.6	ug/L	04/04/12		DD	SW8270 (SIM)
Chrysene	1.1	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Dibenz(a,h)anthracene	0.27	0.010	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachlorobenzene	ND	0.060	ug/L	04/04/12		DD	SW8270 (SIM)
Hexachloroethane	ND	2.4	ug/L	04/04/12		DD	SW8270 (SIM)
Indeno(1,2,3-cd)pyrene	1.5	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachloronitrobenzene	ND	0.10	ug/L	04/04/12		DD	SW8270 (SIM)
Pentachlorophenol	ND	0.80	ug/L	04/04/12		DD	SW8270 (SIM)
Phenanthrene	0.88	0.050	ug/L	04/04/12		DD	SW8270 (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	120		%	04/04/12		DD	15 - 130 %
% 2-Fluorobiphenyl	64		%	04/04/12		DD	15 - 130 %
% 2-Fluorophenol	78		%	04/04/12		DD	15 - 130 %
% Nitrobenzene-d5	84		%	04/04/12		DD	15 - 130 %
% Phenol-d5	77		%	04/04/12		DD	15 - 130 %
% Terphenyl-d14	79		%	04/04/12		DD	15 - 130 %

Comments:

* For Pesticides, due to matrix interference from non target compounds in the sample, an elevated RL was reported. Clean-up procedure was unsuccessful.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

April 17, 2012

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 17, 2012

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 197617, QC Sample No: BB60736 (BB61071, BB61072)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	112	112	0.0	106	107	0.9	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 197603, QC Sample No: BB60961 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)												
ICP Metals - Aqueous												
Arsenic	BDL	<0.003	<0.004	NC	98.5	97.6	0.9	100	99.6	0.4	75 - 125	20
Barium	BDL	0.102	0.102	0	100	100	0.0	103	103	0.0	75 - 125	20
Cadmium	BDL	<0.0005	<0.001	NC	102	102	0.0	100	100	0.0	75 - 125	20
Chromium	BDL	0.0009	<0.001	NC	99.1	99.0	0.1	102	102	0.0	75 - 125	20
Lead	BDL	<0.001	<0.002	NC	98.5	98.3	0.2	101	101	0.0	75 - 125	20
Selenium	BDL	<0.010	<0.010	NC	92.4	91.2	1.3	97.2	97.3	0.1	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	106	106	0.0	118	119	0.8	75 - 125	20
QA/QC Batch 197599, QC Sample No: BB61071 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)												
ICP Metals - Dissolved												
Arsenic	BDL	<0.004	<0.004	NC	92.9	92.7	0.2	93.3	92.6	0.8	75 - 125	20
Barium	BDL	0.017	0.017	0	94.8	94.3	0.5	95.1	94.4	0.7	75 - 125	20
Cadmium	BDL	<0.001	<0.001	NC	96.4	96.5	0.1	96.6	95.6	1.0	75 - 125	20
Chromium	BDL	<0.001	<0.001	NC	92.7	92.2	0.5	93.5	92.2	1.4	75 - 125	20
Lead	BDL	<0.002	<0.002	NC	92.3	92.1	0.2	93.0	91.8	1.3	75 - 125	20
Selenium	BDL	<0.011	<0.011	NC	86.7	86.7	0.0	88.3	87.6	0.8	75 - 125	20
Silver	BDL	<0.001	<0.001	NC	99.2	98.5	0.7	80.1	79.1	1.3	75 - 125	20
QA/QC Batch 197625, QC Sample No: BB61073 (BB61073, BB61074, BB61075, BB61076)												
Mercury - Water	BDL	<0.0002	<0.0002	NC	111	107	3.7	107	104	2.8	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 17, 2012

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 197435, QC Sample No: BB57896 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)										
Chlorinated Herbicides - Ground Water										
2,4,5-T	ND	93	96	3.2				40 - 140	20	
2,4,5-TP (Silvex)	ND	96	99	3.1				40 - 140	20	
2,4-D	ND	103	102	1.0				40 - 140	20	
2,4-DB	ND	43	39	9.8				40 - 140	20	I
Dalapon	ND	62	62	0.0				40 - 140	20	
Dicamba	ND	96	95	1.0				40 - 140	20	
Dichloroprop	ND	106	110	3.7				40 - 140	20	
Dinoseb	ND	69	72	4.3				40 - 140	20	
% DCAA (Surrogate Rec)	63	70	67	4.4				30 - 150	20	
QA/QC Batch 197517, QC Sample No: BB60067 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)										
Pesticides - Ground Water										
4,4' -DDD	ND	97	94	3.1				40 - 140	20	
4,4' -DDE	ND	100	93	7.3				40 - 140	20	
4,4' -DDT	ND	106	98	7.8				40 - 140	20	
a-BHC	ND	97	92	5.3				40 - 140	20	
a-Chlordane	ND	100	93	7.3				40 - 140	20	
Alachlor	ND	N/A	N/A	NC				40 - 140	20	
Aldrin	ND	90	84	6.9				40 - 140	20	
b-BHC	ND	95	85	11.1				40 - 140	20	
Chlordane	ND	N/A	N/A	NC				40 - 140	20	
d-BHC	ND	103	96	7.0				40 - 140	20	
Dieldrin	ND	102	95	7.1				40 - 140	20	
Endosulfan I	ND	97	88	9.7				40 - 140	20	
Endosulfan II	ND	100	93	7.3				40 - 140	20	
Endosulfan sulfate	ND	101	95	6.1				40 - 140	20	
Endrin	ND	106	99	6.8				40 - 140	20	
Endrin aldehyde	ND	98	94	4.2				40 - 140	20	
Endrin ketone	ND	106	100	5.8				40 - 140	20	
g-BHC	ND	99	92	7.3				40 - 140	20	
g-Chlordane	ND	98	90	8.5				40 - 140	20	
Heptachlor	ND	101	94	7.2				40 - 140	20	
Heptachlor epoxide	ND	100	88	12.8				40 - 140	20	
Methoxychlor	ND	118	111	6.1				40 - 140	20	
Toxaphene	ND	N/A	N/A	NC				40 - 140	20	
% DCBP	82	106	101	4.8				30 - 150	20	
% TCMX	80	88	84	4.7				30 - 150	20	
QA/QC Batch 197701, QC Sample No: BB60622 (BB61071, BB61072)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	108	81	28.6	104	90	14.4	50 - 150	20	r
% n-Pentacosane	104	103	76	30.2	99	88	11.8	50 - 150	20	r

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 197518, QC Sample No: BB60727 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)										
Polychlorinated Biphenyls - Ground Water										
PCB-1016	ND	76	75	1.3	85	88	3.5	40 - 140	20	
PCB-1221	ND							40 - 140	20	
PCB-1232	ND							40 - 140	20	
PCB-1242	ND							40 - 140	20	
PCB-1248	ND							40 - 140	20	
PCB-1254	ND							40 - 140	20	
PCB-1260	ND	72	72	0.0	80	85	6.1	40 - 140	20	
PCB-1262	ND							40 - 140	20	
PCB-1268	ND							40 - 140	20	
% DCBP (Surrogate Rec)	71	81	80	1.2	86	92	6.7	30 - 150	20	
% TCMX (Surrogate Rec)	69	77	74	4.0	81	87	7.1	30 - 150	20	
QA/QC Batch 197777, QC Sample No: BB61059 (BB61073, BB61074, BB61075, BB61076)										
TPH by GC (Extractable Products) - Ground Water										
Ext. Petroleum HC	ND	85	80	6.1				50 - 150	20	
% n-Pentacosane	75	55	53	3.7				50 - 150	20	
QA/QC Batch 197840, QC Sample No: BB61059 (BB61074, BB61076)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	122	116	5.0	115	116	0.9	70 - 130	30	
1,1,1-Trichloroethane	ND	108	101	6.7	111	103	7.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	111	108	2.7	106	108	1.9	70 - 130	30	
1,1,2-Trichloroethane	ND	106	101	4.8	102	101	1.0	70 - 130	30	
1,1-Dichloroethane	ND	103	97	6.0	105	97	7.9	70 - 130	30	
1,1-Dichloroethene	ND	97	91	6.4	113	101	11.2	70 - 130	30	
1,1-Dichloropropene	ND	104	98	5.9	113	104	8.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	99	93	6.3	87	85	2.3	70 - 130	30	
1,2,3-Trichloropropane	ND	96	96	0.0	92	96	4.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	101	93	8.2	95	91	4.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	105	1.0	106	103	2.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	120	89	29.7	92	85	7.9	70 - 130	30	
1,2-Dichlorobenzene	ND	97	96	1.0	102	97	5.0	70 - 130	30	
1,2-Dichloroethane	ND	105	99	5.9	107	104	2.8	70 - 130	30	
1,2-Dichloropropane	ND	111	107	3.7	130	120	8.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	104	103	1.0	105	101	3.9	70 - 130	30	
1,3-Dichlorobenzene	ND	101	98	3.0	102	99	3.0	70 - 130	30	
1,3-Dichloropropane	ND	103	102	1.0	106	101	4.8	70 - 130	30	
1,4-Dichlorobenzene	ND	92	91	1.1	96	92	4.3	70 - 130	30	
2,2-Dichloropropane	ND	86	81	6.0	79	60	27.3	70 - 130	30	m
2-Chlorotoluene	ND	105	101	3.9	106	103	2.9	70 - 130	30	
2-Hexanone	ND	103	98	5.0	96	91	5.3	70 - 130	30	
2-Isopropyltoluene	ND	101	99	2.0	106	100	5.8	70 - 130	30	
4-Chlorotoluene	ND	101	97	4.0	104	103	1.0	70 - 130	30	
4-Methyl-2-pentanone	ND	100	95	5.1	95	95	0.0	70 - 130	30	
Acetone	ND	103	97	6.0	109	119	8.8	70 - 130	30	
Acrylonitrile	ND	105	106	0.9	107	104	2.8	70 - 130	30	
Benzene	ND	101	97	4.0	106	100	5.8	70 - 130	30	
Bromobenzene	ND	101	96	5.1	100	95	5.1	70 - 130	30	
Bromochloromethane	ND	105	103	1.9	107	103	3.8	70 - 130	30	
Bromodichloromethane	ND	124	116	6.7	135	129	4.5	70 - 130	30	m
Bromoform	ND	100	101	1.0	104	108	3.8	70 - 130	30	

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromomethane	ND	90	90	0.0	115	104	10.0	70 - 130	30	
Carbon Disulfide	ND	137	132	3.7	117	101	14.7	70 - 130	30	I
Carbon tetrachloride	ND	112	104	7.4	118	108	8.8	70 - 130	30	
Chlorobenzene	ND	105	101	3.9	108	105	2.8	70 - 130	30	
Chloroethane	ND	93	92	1.1	107	97	9.8	70 - 130	30	
Chloroform	ND	106	100	5.8	107	100	6.8	70 - 130	30	
Chloromethane	ND	100	92	8.3	114	99	14.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	104	98	5.9	106	100	5.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	106	99	6.8	105	99	5.9	70 - 130	30	
Dibromochloromethane	ND	114	112	1.8	119	109	8.8	70 - 130	30	
Dibromoethane	ND	104	101	2.9	105	104	1.0	70 - 130	30	
Dibromomethane	ND	110	107	2.8	124	116	6.7	70 - 130	30	
Dichlorodifluoromethane	ND	81	77	5.1	123	89	32.1	70 - 130	30	r
Ethylbenzene	ND	107	102	4.8	104	104	0.0	70 - 130	30	
Hexachlorobutadiene	ND	95	89	6.5	99	92	7.3	70 - 130	30	
Isopropylbenzene	ND	110	107	2.8	112	108	3.6	70 - 130	30	
m&p-Xylene	ND	100	100	0.0	103	102	1.0	70 - 130	30	
Methyl ethyl ketone	ND	91	91	0.0	97	99	2.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	96	90	6.5	87	84	3.5	70 - 130	30	
Methylene chloride	ND	89	84	5.8	95	88	7.7	70 - 130	30	
Naphthalene	ND	98	96	2.1	89	91	2.2	70 - 130	30	
n-Butylbenzene	ND	108	105	2.8	111	103	7.5	70 - 130	30	
n-Propylbenzene	ND	98	94	4.2	104	100	3.9	70 - 130	30	
o-Xylene	ND	99	98	1.0	102	99	3.0	70 - 130	30	
p-Isopropyltoluene	ND	113	110	2.7	111	107	3.7	70 - 130	30	
sec-Butylbenzene	ND	102	101	1.0	108	103	4.7	70 - 130	30	
Styrene	ND	87	89	2.3	91	91	0.0	70 - 130	30	
tert-Butylbenzene	ND	103	101	2.0	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	102	100	2.0	112	103	8.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	95	94	1.1	94	91	3.2	70 - 130	30	
Toluene	ND	104	100	3.9	109	103	5.7	70 - 130	30	
trans-1,2-Dichloroethene	ND	99	95	4.1	108	101	6.7	70 - 130	30	
trans-1,3-Dichloropropene	ND	110	102	7.5	106	98	7.8	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	97	93	4.2	92	83	10.3	70 - 130	30	
Trichloroethene	ND	103	97	6.0	111	103	7.5	70 - 130	30	
Trichlorofluoromethane	ND	114	108	5.4	115	103	11.0	70 - 130	30	
Trichlorotrifluoroethane	ND	98	93	5.2	106	96	9.9	70 - 130	30	
Vinyl chloride	ND	93	87	6.7	109	94	14.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	102	101	1.0	102	101	1.0	70 - 130	30	
% Bromofluorobenzene	93	102	103	1.0	103	103	0.0	70 - 130	30	
% Dibromofluoromethane	98	103	101	2.0	100	99	1.0	70 - 130	30	
% Toluene-d8	100	100	99	1.0	101	101	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 197747, QC Sample No: BB61060 (BB61071, BB61072)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	119	116	2.6	110	112	1.8	70 - 130	30
1,1,1-Trichloroethane	ND	109	98	10.6	102	102	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	113	111	1.8	106	110	3.7	70 - 130	30
1,1,2-Trichloroethane	ND	107	105	1.9	98	97	1.0	70 - 130	30
1,1-Dichloroethane	ND	105	97	7.9	97	97	0.0	70 - 130	30
1,1-Dichloroethene	ND	100	89	11.6	96	98	2.1	70 - 130	30

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	108	99	8.7	100	103	3.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	98	96	2.1	82	87	5.9	70 - 130	30	
1,2,3-Trichloropropane	ND	98	97	1.0	96	98	2.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	100	98	2.0	89	92	3.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	111	105	5.6	100	104	3.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	95	98	3.1	81	89	9.4	70 - 130	30	
1,2-Dichlorobenzene	ND	101	97	4.0	94	98	4.2	70 - 130	30	
1,2-Dichloroethane	ND	103	100	3.0	100	99	1.0	70 - 130	30	
1,2-Dichloropropane	ND	106	101	4.8	99	96	3.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	111	104	6.5	101	103	2.0	70 - 130	30	
1,3-Dichlorobenzene	ND	105	99	5.9	96	98	2.1	70 - 130	30	
1,3-Dichloropropane	ND	105	102	2.9	98	101	3.0	70 - 130	30	
1,4-Dichlorobenzene	ND	97	92	5.3	86	91	5.6	70 - 130	30	
2,2-Dichloropropane	ND	103	91	12.4	66	65	1.5	70 - 130	30	m
2-Chlorotoluene	ND	109	100	8.6	101	102	1.0	70 - 130	30	
2-Hexanone	ND	104	102	1.9	85	91	6.8	70 - 130	30	
2-Isopropyltoluene	ND	107	101	5.8	96	100	4.1	70 - 130	30	
4-Chlorotoluene	ND	107	99	7.8	100	103	3.0	70 - 130	30	
4-Methyl-2-pentanone	ND	102	105	2.9	93	95	2.1	70 - 130	30	
Acetone	ND	111	116	4.4	107	104	2.8	70 - 130	30	
Acrylonitrile	ND	111	108	2.7	97	98	1.0	70 - 130	30	
Benzene	ND	106	97	8.9	97	98	1.0	70 - 130	30	
Bromobenzene	ND	101	95	6.1	95	96	1.0	70 - 130	30	
Bromochloromethane	ND	109	102	6.6	101	101	0.0	70 - 130	30	
Bromodichloromethane	ND	112	109	2.7	110	103	6.6	70 - 130	30	
Bromoform	ND	104	107	2.8	98	101	3.0	70 - 130	30	
Bromomethane	ND	99	91	8.4	84	71	16.8	70 - 130	30	
Carbon Disulfide	ND	146	130	11.6	96	97	1.0	70 - 130	30	l
Carbon tetrachloride	ND	112	100	11.3	108	107	0.9	70 - 130	30	
Chlorobenzene	ND	107	101	5.8	100	101	1.0	70 - 130	30	
Chloroethane	ND	93	85	9.0	89	82	8.2	70 - 130	30	
Chloroform	ND	108	99	8.7	99	99	0.0	70 - 130	30	
Chloromethane	ND	93	84	10.2	62	64	3.2	70 - 130	30	m
cis-1,2-Dichloroethene	ND	104	96	8.0	96	96	0.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	110	106	3.7	98	95	3.1	70 - 130	30	
Dibromochloromethane	ND	115	115	0.0	108	111	2.7	70 - 130	30	
Dibromoethane	ND	108	106	1.9	99	99	0.0	70 - 130	30	
Dibromomethane	ND	107	104	2.8	103	102	1.0	70 - 130	30	
Dichlorodifluoromethane	ND	80	69	14.8	85	59	36.1	70 - 130	30	l,m,r
Ethylbenzene	ND	111	105	5.6	100	102	2.0	70 - 130	30	
Hexachlorobutadiene	ND	96	87	9.8	86	90	4.5	70 - 130	30	
Isopropylbenzene	ND	113	104	8.3	103	106	2.9	70 - 130	30	
m&p-Xylene	ND	104	100	3.9	96	98	2.1	70 - 130	30	
Methyl ethyl ketone	ND	107	106	0.9	95	92	3.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	103	99	4.0	87	87	0.0	70 - 130	30	
Methylene chloride	ND	92	85	7.9	85	86	1.2	70 - 130	30	
Naphthalene	ND	99	101	2.0	78	89	13.2	70 - 130	30	
n-Butylbenzene	ND	113	108	4.5	99	103	4.0	70 - 130	30	
n-Propylbenzene	ND	102	95	7.1	99	101	2.0	70 - 130	30	
o-Xylene	ND	104	97	7.0	94	97	3.1	70 - 130	30	
p-Isopropyltoluene	ND	121	110	9.5	103	105	1.9	70 - 130	30	
sec-Butylbenzene	ND	109	101	7.6	99	103	4.0	70 - 130	30	
Styrene	ND	91	89	2.2	83	87	4.7	70 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
tert-Butylbenzene	ND	109	100	8.6	100	102	2.0	70 - 130	30	
Tetrachloroethene	ND	107	99	7.8	100	103	3.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	98	3.0	88	88	0.0	70 - 130	30	
Toluene	ND	109	101	7.6	101	101	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	103	93	10.2	96	99	3.1	70 - 130	30	
trans-1,3-Dichloropropene	ND	110	114	3.6	96	95	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	119	120	0.8	87	88	1.1	70 - 130	30	
Trichloroethene	ND	108	97	10.7	101	102	1.0	70 - 130	30	
Trichlorofluoromethane	ND	115	103	11.0	100	99	1.0	70 - 130	30	
Trichlorotrifluoroethane	ND	102	89	13.6	93	96	3.2	70 - 130	30	
Vinyl chloride	ND	100	88	12.8	95	96	1.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	101	101	0.0	102	103	1.0	70 - 130	30	
% Bromofluorobenzene	94	103	103	0.0	103	101	2.0	70 - 130	30	
% Dibromofluoromethane	100	99	99	0.0	101	100	1.0	70 - 130	30	
% Toluene-d8	101	101	101	0.0	103	99	4.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 197582, QC Sample No: BB61071 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

Semivolatiles - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	56	55	1.8				30 - 130	20	
1,2,4-Trichlorobenzene	ND	71	70	1.4				30 - 130	20	
1,2-Dichlorobenzene	ND	74	72	2.7				30 - 130	20	
1,3-Dichlorobenzene	ND	72	71	1.4				30 - 130	20	
1,4-Dichlorobenzene	ND	73	73	0.0				30 - 130	20	
2,4,5-Trichlorophenol	ND	77	71	8.1				30 - 130	20	
2,4,6-Trichlorophenol	ND	84	84	0.0				30 - 130	20	
2,4-Dichlorophenol	ND	83	82	1.2				30 - 130	20	
2,4-Dimethylphenol	ND	41	43	4.8				30 - 130	20	
2,4-Dinitrophenol	ND	28	44	44.4				30 - 130	20	l,r
2,4-Dinitrotoluene	ND	79	82	3.7				30 - 130	20	
2,6-Dinitrotoluene	ND	82	82	0.0				30 - 130	20	
2-Chloronaphthalene	ND	81	81	0.0				30 - 130	20	
2-Chlorophenol	ND	72	72	0.0				30 - 130	20	
2-Methylnaphthalene	ND	76	76	0.0				30 - 130	20	
2-Methylphenol (o-cresol)	ND	70	69	1.4				30 - 130	20	
2-Nitroaniline	ND	34	43	23.4				30 - 130	20	r
2-Nitrophenol	ND	77	77	0.0				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	78	78	0.0				30 - 130	20	
3,3'-Dichlorobenzidine	ND	N/A	N/A	NC				30 - 130	20	
3-Nitroaniline	ND	70	72	2.8				30 - 130	20	
4,6-Dinitro-2-methylphenol	ND	52	71	30.9				30 - 130	20	r
4-Bromophenyl phenyl ether	ND	82	78	5.0				30 - 130	20	
4-Chloro-3-methylphenol	ND	82	83	1.2				30 - 130	20	
4-Chloroaniline	ND	16	16	0.0				30 - 130	20	l
4-Chlorophenyl phenyl ether	ND	86	86	0.0				30 - 130	20	
4-Nitroaniline	ND	70	72	2.8				30 - 130	20	
4-Nitrophenol	ND	42	52	21.3				30 - 130	20	r
Acenaphthene	ND	83	82	1.2				30 - 130	20	
Acenaphthylene	ND	70	70	0.0				30 - 130	20	
Acetophenone	ND	54	55	1.8				30 - 130	20	
Aniline	ND	N/A	N/A	NC				30 - 130	20	
Anthracene	ND	79	80	1.3				30 - 130	20	

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Azobenzene	ND	53	54	1.9				30 - 130	20	
Benz(a)anthracene	ND	90	91	1.1				30 - 130	20	
Benzidine	ND	N/A	N/A	NC				30 - 130	20	
Benzo(a)pyrene	ND	75	74	1.3				30 - 130	20	
Benzo(b)fluoranthene	ND	82	75	8.9				30 - 130	20	
Benzo(ghi)perylene	ND	65	78	18.2				30 - 130	20	
Benzo(k)fluoranthene	ND	93	84	10.2				30 - 130	20	
Benzoic acid	ND	N/A	N/A	NC				30 - 130	20	
Benzyl butyl phthalate	ND	98	79	21.5				30 - 130	20	r
Bis(2-chloroethoxy)methane	ND	39	38	2.6				30 - 130	20	
Bis(2-chloroethyl)ether	ND	66	67	1.5				30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	80	82	2.5				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	119	95	22.4				30 - 130	20	r
Carbazole	ND	105	114	8.2				30 - 130	20	
Chrysene	ND	82	83	1.2				30 - 130	20	
Dibenz(a,h)anthracene	ND	63	77	20.0				30 - 130	20	
Dibenzofuran	ND	81	82	1.2				30 - 130	20	
Diethyl phthalate	ND	87	86	1.2				30 - 130	20	
Dimethylphthalate	ND	85	84	1.2				30 - 130	20	
Di-n-butylphthalate	ND	95	91	4.3				30 - 130	20	
Di-n-octylphthalate	ND	98	88	10.8				30 - 130	20	
Fluoranthene	ND	80	85	6.1				30 - 130	20	
Fluorene	ND	87	88	1.1				30 - 130	20	
Hexachlorobenzene	ND	88	83	5.8				30 - 130	20	
Hexachlorobutadiene	ND	73	72	1.4				30 - 130	20	
Hexachlorocyclopentadiene	ND	15	18	18.2				30 - 130	20	l
Hexachloroethane	ND	73	73	0.0				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	65	78	18.2				30 - 130	20	
Isophorone	ND	65	64	1.6				30 - 130	20	
Naphthalene	ND	81	80	1.2				30 - 130	20	
Nitrobenzene	ND	80	81	1.2				30 - 130	20	
N-Nitrosodimethylamine	ND	56	55	1.8				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	88	86	2.3				30 - 130	20	
N-Nitrosodiphenylamine	ND	84	86	2.4				30 - 130	20	
Pentachloronitrobenzene	ND	120	114	5.1				30 - 130	20	
Pentachlorophenol	ND	48	55	13.6				30 - 130	20	
Phenanthrene	ND	86	86	0.0				30 - 130	20	
Phenol	ND	76	77	1.3				30 - 130	20	
Pyrene	ND	81	87	7.1				30 - 130	20	
Pyridine	ND	<5	<5	NC				30 - 130	20	l
% 2,4,6-Tribromophenol	111	84	79	6.1				15 - 130	20	
% 2-Fluorobiphenyl	75	73	72	1.4				30 - 130	20	
% 2-Fluorophenol	78	59	59	0.0				15 - 130	20	
% Nitrobenzene-d5	81	74	74	0.0				30 - 130	20	
% Phenol-d5	69	60	59	1.7				15 - 130	20	
% Terphenyl-d14	91	83	92	10.3				30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 198243, QC Sample No: BB61075 (BB61075)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	118	119	0.8	123	121	1.6	70 - 130	30

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1-Trichloroethane	ND	95	96	1.0	101	95	6.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	102	99	3.0	106	107	0.9	70 - 130	30	
1,1,2-Trichloroethane	ND	91	92	1.1	94	95	1.1	70 - 130	30	
1,1-Dichloroethane	ND	89	90	1.1	94	90	4.3	70 - 130	30	
1,1-Dichloroethene	ND	86	90	4.5	102	96	6.1	70 - 130	30	
1,1-Dichloropropene	ND	93	95	2.1	102	100	2.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	89	92	3.3	87	94	7.7	70 - 130	30	
1,2,3-Trichloropropane	ND	94	92	2.2	95	98	3.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	91	92	1.1	92	97	5.3	70 - 130	30	
1,2,4-Trimethylbenzene	ND	104	105	1.0	106	105	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	87	94	7.7	82	94	13.6	70 - 130	30	
1,2-Dichlorobenzene	ND	95	97	2.1	101	103	2.0	70 - 130	30	
1,2-Dichloroethane	ND	92	90	2.2	96	97	1.0	70 - 130	30	
1,2-Dichloropropane	ND	89	91	2.2	96	91	5.3	70 - 130	30	
1,3,5-Trimethylbenzene	ND	102	104	1.9	106	102	3.8	70 - 130	30	
1,3-Dichlorobenzene	ND	97	99	2.0	101	103	2.0	70 - 130	30	
1,3-Dichloropropane	ND	95	95	0.0	99	100	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	92	95	3.2	99	97	2.0	70 - 130	30	
2,2-Dichloropropane	ND	91	90	1.1	79	75	5.2	70 - 130	30	
2-Chlorotoluene	ND	99	101	2.0	103	100	3.0	70 - 130	30	
2-Hexanone	ND	89	85	4.6	83	93	11.4	70 - 130	30	
2-Isopropyltoluene	ND	99	101	2.0	108	105	2.8	70 - 130	30	
4-Chlorotoluene	ND	97	99	2.0	106	103	2.9	70 - 130	30	
4-Methyl-2-pentanone	ND	85	84	1.2	81	87	7.1	70 - 130	30	
Acetone	ND	85	85	0.0	98	101	3.0	70 - 130	30	
Acrylonitrile	ND	92	91	1.1	94	94	0.0	70 - 130	30	
Benzene	ND	92	94	2.2	98	96	2.1	70 - 130	30	
Bromobenzene	ND	94	95	1.1	98	95	3.1	70 - 130	30	
Bromochloromethane	ND	97	96	1.0	102	101	1.0	70 - 130	30	
Bromodichloromethane	ND	99	97	2.0	111	102	8.5	70 - 130	30	
Bromoform	ND	118	116	1.7	127	129	1.6	70 - 130	30	
Bromomethane	ND	84	89	5.8	80	78	2.5	70 - 130	30	
Carbon Disulfide	ND	131	134	2.3	>150	>150	NC	70 - 130	30	l,m
Carbon tetrachloride	ND	99	102	3.0	106	105	0.9	70 - 130	30	
Chlorobenzene	ND	101	103	2.0	109	107	1.9	70 - 130	30	
Chloroethane	ND	84	86	2.4	101	92	9.3	70 - 130	30	
Chloroform	ND	92	93	1.1	96	92	4.3	70 - 130	30	
Chloromethane	ND	91	91	0.0	99	104	4.9	70 - 130	30	
cis-1,2-Dichloroethene	ND	93	93	0.0	97	91	6.4	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	95	1.0	97	98	1.0	70 - 130	30	
Dibromochloromethane	ND	107	108	0.9	114	114	0.0	70 - 130	30	
Dibromoethane	ND	94	93	1.1	97	101	4.0	70 - 130	30	
Dibromomethane	ND	95	95	0.0	101	101	0.0	70 - 130	30	
Dichlorodifluoromethane	ND	81	83	2.4	114	100	13.1	70 - 130	30	
Ethylbenzene	ND	105	108	2.8	111	106	4.6	70 - 130	30	
Hexachlorobutadiene	ND	87	89	2.3	94	93	1.1	70 - 130	30	
Isopropylbenzene	ND	104	104	0.0	110	104	5.6	70 - 130	30	
m&p-Xylene	ND	101	104	2.9	108	102	5.7	70 - 130	30	
Methyl ethyl ketone	ND	83	86	3.6	82	82	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	96	95	1.0	89	93	4.4	70 - 130	30	
Methylene chloride	ND	80	82	2.5	86	83	3.6	70 - 130	30	
Naphthalene	ND	89	91	2.2	83	98	16.6	70 - 130	30	
n-Butylbenzene	ND	101	105	3.9	105	102	2.9	70 - 130	30	

QA/QC Data

SDG I.D.: GBB61071

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
n-Propylbenzene	ND	92	95	3.2	104	98	5.9	70 - 130	30
o-Xylene	ND	100	102	2.0	107	105	1.9	70 - 130	30
p-Isopropyltoluene	ND	107	109	1.9	107	105	1.9	70 - 130	30
sec-Butylbenzene	ND	98	101	3.0	106	104	1.9	70 - 130	30
Styrene	ND	97	97	0.0	104	104	0.0	70 - 130	30
tert-Butylbenzene	ND	98	99	1.0	105	101	3.9	70 - 130	30
Tetrachloroethene	ND	95	99	4.1	106	103	2.9	70 - 130	30
Tetrahydrofuran (THF)	ND	82	81	1.2	82	85	3.6	70 - 130	30
Toluene	ND	93	95	2.1	98	97	1.0	70 - 130	30
trans-1,2-Dichloroethene	ND	90	91	1.1	98	95	3.1	70 - 130	30
trans-1,3-Dichloropropene	ND	103	102	1.0	101	102	1.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	112	107	4.6	93	104	11.2	70 - 130	30
Trichloroethene	ND	96	98	2.1	105	99	5.9	70 - 130	30
Trichlorofluoromethane	ND	100	104	3.9	106	97	8.9	70 - 130	30
Trichlorotrifluoroethane	ND	84	89	5.8	101	92	9.3	70 - 130	30
Vinyl chloride	ND	83	85	2.4	95	93	2.1	70 - 130	30
% 1,2-dichlorobenzene-d4	99	100	101	1.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	87	96	95	1.0	98	97	1.0	70 - 130	30
% Dibromofluoromethane	96	101	100	1.0	101	99	2.0	70 - 130	30
% Toluene-d8	97	96	96	0.0	96	97	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
April 17, 2012

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB61071

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB61071	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61071	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61071	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61071	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.19	0.050	0.077	0.077	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.21	0.040	0.06	0.06	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.48	0.050	0.08	0.08	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.48	0.050	0.3	0.3	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.31	0.050	0.2	0.2	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.31	0.050	0.3	0.3	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.29	0.050	0.2	0.2	ug/L
BB61071	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.05	0.010	0.01	0.01	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1016	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1016	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1221	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1221	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1232	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1232	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1242	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1242	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1248	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1248	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1254	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1254	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1260	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	12	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PCB_WMR	PCB-1260	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	12	1.0	0.5	0.5	ug/L
BB61071	MAGU-DAS	$PESTGAW	Aldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.015	0.0031	0.0031	ug/L
BB61071	MAGU-DAS	$PESTGAW	b-BHC	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.05	0.019	0.019	ug/L
BB61071	MAGU-DAS	$PESTGAW	g-BHC (Lindane)	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L
BB61071	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61071	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61071	MAGU-DAS	$PESTGAW	4,4' -DDD	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.15	0.15	ug/L
BB61071	MAGU-DAS	$PESTGAW	4,4' -DDE	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61071	MAGU-DAS	$PESTGAW	4,4' -DDT	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.1	0.1	ug/L
BB61071	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.40	0.002	0.002	ug/L
BB61071	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.40	0.1	0.1	ug/L
BB61071	MAGU-DAS	$PESTGAW	Endrin	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61071	MAGU-DAS	$PESTGAW	Heptachlor	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61071	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB61071

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB61071	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61071	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	5.0	3	3	ug/L
BB61071	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	5.0	1	1	ug/L
BB61072	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB61072	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61072	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61072	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61072	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	1.1	0.050	0.077	0.077	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.38	0.040	0.06	0.06	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.38	0.040	0.3	0.3	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.51	0.050	0.08	0.08	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.51	0.050	0.3	0.3	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.36	0.050	0.2	0.2	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.36	0.050	0.3	0.3	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.32	0.050	0.2	0.2	ug/L
BB61072	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.06	0.010	0.01	0.01	ug/L
BB61072	MAGU-DAS	$PCB_WMR	Total PCBs	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	2.6	0.50	0.5	0.5	ug/L
BB61072	MAGU-DAS	$PCB_WMR	Total PCBs	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	2.6	0.50	0.5	0.5	ug/L
BB61072	MAGU-DAS	$PESTGAW	Aldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.015	0.0031	0.0031	ug/L
BB61072	MAGU-DAS	$PESTGAW	b-BHC	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.05	0.019	0.019	ug/L
BB61072	MAGU-DAS	$PESTGAW	g-BHC (Lindane)	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L
BB61072	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61072	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61072	MAGU-DAS	$PESTGAW	4,4' -DDD	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.15	0.15	ug/L
BB61072	MAGU-DAS	$PESTGAW	4,4' -DDE	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61072	MAGU-DAS	$PESTGAW	4,4' -DDT	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61072	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.020	0.002	0.002	ug/L
BB61072	MAGU-DAS	$PESTGAW	Endrin	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61072	MAGU-DAS	$PESTGAW	Heptachlor	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61072	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L
BB61072	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61072	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	5.0	3	3	ug/L
BB61072	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	5.0	1	1	ug/L
BB61072	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.039	0.004	0.01	0.01	mg/L
BB61072	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.039	0.004	0.004	0.004	mg/L
BB61072	MAGU-DAS	CD-WM	Cadmium	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.006	0.001	0.005	0.005	mg/L
BB61072	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.112	0.002	0.015	0.015	mg/L
BB61072	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.112	0.002	0.013	0.013	mg/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB61071

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB61073	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61073	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61073	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61073	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	1.9	0.050	0.077	0.077	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.52	0.040	0.06	0.06	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.52	0.040	0.3	0.3	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.59	0.050	0.08	0.08	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.59	0.050	0.3	0.3	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.31	0.050	0.2	0.2	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.31	0.050	0.3	0.3	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.41	0.050	0.2	0.2	ug/L
BB61073	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.08	0.010	0.01	0.01	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1016	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1016	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1221	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1221	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1232	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1232	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1242	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1242	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1248	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1248	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1254	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1254	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1260	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	PCB-1260	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	Total PCBs	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	4.1	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PCB_WMR	Total PCBs	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	4.1	1.0	0.5	0.5	ug/L
BB61073	MAGU-DAS	$PESTGAW	Aldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.015	0.0031	0.0031	ug/L
BB61073	MAGU-DAS	$PESTGAW	b-BHC	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.05	0.019	0.019	ug/L
BB61073	MAGU-DAS	$PESTGAW	g-BHC (Lindane)	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L
BB61073	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61073	MAGU-DAS	$PESTGAW	Chlordane	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	1.5	0.3	0.3	ug/L
BB61073	MAGU-DAS	$PESTGAW	4,4' -DDD	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.15	0.15	ug/L
BB61073	MAGU-DAS	$PESTGAW	4,4' -DDE	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61073	MAGU-DAS	$PESTGAW	4,4' -DDT	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61073	MAGU-DAS	$PESTGAW	Dieldrin	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.020	0.002	0.002	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB61071

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB61073	MAGU-DAS	$PESTGAW	Endrin	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.5	0.1	0.1	ug/L
BB61073	MAGU-DAS	$PESTGAW	Heptachlor	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61073	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	0.25	0.2	0.2	ug/L
BB61073	MAGU-DAS	$PESTGAW	Heptachlor epoxide	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	0.25	0.05	0.05	ug/L
BB61073	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	GWPC (µg/L)	ND	5.0	3	3	ug/L
BB61073	MAGU-DAS	$PESTGAW	Toxaphene	ug/L	CT	Pesticides, Pcb's, Tph, A	SWPC (µg/L)	ND	5.0	1	1	ug/L
BB61074	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5	0.5	0.5	ug/L
BB61074	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61074	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61074	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61074	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.25	0.050	0.077	0.077	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Bis(2-ethylhexyl)phthalate	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	6	1.6	2	2	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.21	0.040	0.06	0.06	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.66	0.050	0.08	0.08	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.66	0.050	0.3	0.3	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.3	0.050	0.2	0.2	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.43	0.050	0.2	0.2	ug/L
BB61074	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.07	0.010	0.01	0.01	ug/L
BB61074	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.007	0.004	0.004	0.004	mg/L
BB61074	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.030	0.002	0.015	0.015	mg/L
BB61074	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.030	0.002	0.013	0.013	mg/L
BB61075	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB61075	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61075	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61075	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61075	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.72	0.050	0.077	0.077	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Bis(2-ethylhexyl)phthalate	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	10	1.6	2	2	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.55	0.040	0.06	0.06	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.55	0.040	0.3	0.3	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	2.1	0.050	0.08	0.08	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	2.1	0.050	0.3	0.3	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(k)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.51	0.050	0.5	0.5	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(k)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.51	0.050	0.3	0.3	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.95	0.050	0.2	0.2	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.95	0.050	0.3	0.3	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	1.4	0.050	0.2	0.2	ug/L

Sample Criteria Exceedences Report

Requested Criteria: GWP, SWP

GBB61071

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB61075	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.25	0.010	0.2	0.2	ug/L
BB61075	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.25	0.010	0.01	0.01	ug/L
BB61075	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.014	0.004	0.01	0.01	mg/L
BB61075	MAGU-DAS	AS-WM	Arsenic	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.014	0.004	0.004	0.004	mg/L
BB61075	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.086	0.002	0.015	0.015	mg/L
BB61075	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.086	0.002	0.013	0.013	mg/L
BB61076	MAGU-DAS	$8260GWR	Acrylonitrile	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	5.0	0.5	0.5	ug/L
BB61076	MAGU-DAS	$8260GWR	Dibromoethane	ug/L	CT	Volatile Organic Compound	GWPC (µg/L)	ND	1.0	0.05	0.05	ug/L
BB61076	MAGU-DAS	$8270-SIMFSR	Pyridine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	5.0	0.7	0.7	ug/L
BB61076	MAGU-DAS	$8270-SIMFSR	Aniline	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	10	6	6	ug/L
BB61076	MAGU-DAS	$8270-SIMFSR	3,3'-Dichlorobenzidine	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	ND	50	10	10	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Phenanthrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.88	0.050	0.077	0.077	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Bis(2-ethylhexyl)phthalate	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	3.9	1.6	2	2	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.78	0.040	0.06	0.06	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benz(a)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.78	0.040	0.3	0.3	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	2.2	0.050	0.08	0.08	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(b)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	2.2	0.050	0.3	0.3	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(k)fluoranthene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.61	0.050	0.5	0.5	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(k)fluoranthene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.61	0.050	0.3	0.3	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	1.1	0.050	0.2	0.2	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Benzo(a)pyrene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	1.1	0.050	0.3	0.3	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Indeno(1,2,3-cd)pyrene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	1.5	0.050	0.2	0.2	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	GWPC (µg/L)	0.27	0.010	0.2	0.2	ug/L
BB61076	MAGU-DAS	$8270-SIMR	Dibenz(a,h)anthracene	ug/L	CT	Semivolatile Organic Comp	SWPC (µg/L)	0.27	0.010	0.01	0.01	ug/L
BB61076	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	GWPC (µg/L)	0.019	0.002	0.015	0.015	mg/L
BB61076	MAGU-DAS	PB-WM	Lead	ug/L	CT	Inorganic Substances	SWPC (µg/L)	0.019	0.002	0.013	0.013	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB61071, BB61072, BB61073, BB61074, BB61075, BB61076

Sampling Date(s): 4/2/2012

RCP Methods Used:

☐ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: _____

Date: Tuesday, April 17, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

The client requested a shorter list of elements than the 6010 RCP list.

Volatile 8260 analysis:
The reporting level for Acrylonitrile is above the GWP criteria.
Dibromoethane doesn't meet GWP criteria, this compound is analyzed by GC/ECD method 504 or 8011 when this criteria needs to be met.

8270 Semi-volatile Organics:
In order to achieve the requested reporting levels for the target compounds, the sample was extracted and analyzed via 8270 selective ion monitoring (SIM) as well as 8270 full scan.
Pyridine was analyzed only by full scan and the reporting level does not meet GWP criteria.
Aniline and 3,3- Dichlorobenzidine reporting levels do not meet GWP criteria.

Pesticide 8081 analysis:
Some samples required a dilution due to the presence of non-target compounds; not all requested reporting levels were achieved.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197701 (Samples: (BB61071, BB61072): -----

The LCS/LCSD RPD was above 20%, both recoveries were within criteria. No significant analytical bias is suspected.

Instrument: Au-fid1 04/09/12-1 (BB61073, BB61074, BB61075)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/9/2012

Instrument: Au-xl1 04/05/12-2 (BB61071, BB61072)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 4/5/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Instrument: Au-xl1 04/06/12-1 (BB61076)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/6/2012

QC Comments: QC Batch 97777 04/05/12 (BB61073, BB61074, BB61075, BB61076)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB60622, QA/QC Batch: 197701 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: % n-Pentacosane(30.2%), Ext. Petroleum HC(28.6%)

---------- Sample No: BB61059, QA/QC Batch: 197777 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd3 04/06/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

Initial Calibration ECD3-040612
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Jeff Bucko
Position: Chemist
Date: 4/6/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

QC Comments: QC Batch 97435 04/01/12 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted.

QC (Batch Specific)

---------- Sample No: BB57896, QA/QC Batch: 197435 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: 2,4-DB(39%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 04/04/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 4/4/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

QC (Site Specific)

---------- Sample No: BB61073, QA/QC Batch: 197625 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB60736, QA/QC Batch: 197617 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp9 04/03/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/3/2012

Instrument: Icp9 04/04/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Printed Name Laura Kinnin
Position: Chemist
Date: 4/4/2012

Instrument: Icp9 04/06/12-1 (BB61072)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 4/6/2012

QC (Site Specific)

---------- Sample No: BB61071, QA/QC Batch: 197599 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 20% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB60961, QA/QC Batch: 197603 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd1 04/05/12-1 (BB61071, BB61072, BB61073)

8082 Narration:

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/5/2012

Instrument: Au-ecd7 04/04/12-1 (BB61074, BB61075, BB61076)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 4/4/2012

QC Comments: QC Batch 97518 04/02/12 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Batch Specific)

---------- Sample No: BB60727, QA/QC Batch: 197518 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 04/04/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Printed Name Mark Rochette
Position: Chemist
Date: 4/4/2012

QC Comments: QC Batch 97517 04/02/12 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

A LCS and LCS duplicate were performed instead of a matrix spike and matrix spike duplicate, unless otherwise noted. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane.

QC (Batch Specific)

---------- Sample No: BB60067, QA/QC Batch: 197517 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197582 (Samples: (BB661071, BB61072, BB1073, BB1074, BB1075, BB1076): -----

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below method criteria. A low bias for these compounds is likely. (Compounds listed below)

Instrument: Chem12 04/06/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0405):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Aniline, Benzoic Acid, 4-chloroaniline, 2,4-dinitrophenol, Pentachlorophenol, Carbazole, 3,3'-dichlorobenzidine

The following compounds failed to meet the minimum required response factor: 2-nitrophenol

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzyl Alcohol, 4-Chloroaniline, Hexachlorocyclopentadiene, 3,3'-dichlorobenzidine

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Printed Name Damien Drobinski
Position: Chemist
Date: 4/6/2012

QC Comments: QC Batch 97582 04/03/12 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QC (Site Specific)

---------- Sample No: BB61071, QA/QC Batch: 197582 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(28%), 4-Chloroaniline(16%), Hexachlorocyclopentadiene(15%), Pyridine(<5%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 4-Chloroaniline(16%), Hexachlorocyclopentadiene(18%), Pyridine(<5%)

All LCS/LCSD RPDs were less than 20% with the following exceptions: 2,4-Dinitrophenol(44.4%), 2-Nitroaniline(23.4%), 4,6-Dinitro-2-methylphenol(30.9%), 4-Nitrophenol(21.3%), Benzyl butyl phthalate(21.5%), Bis(2-ethylhexyl)phthalate(22.4%)

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.
Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

SVOASIM Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Chem04 04/04/12-1 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0401):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Acenaphthylene, % 2,4,6-Tribromophenol, Pentachlorophenol, Benzo(a)pyrene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Printed Name Damien Drobinski
Position: Chemist
Date: 4/4/2012

Instrument: Chem04 04/05/12-1 (BB61071)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

In the event that lower detection levels were requested, the samples may have been analyzed by selective ion monitoring (SIM) mode.

If PAH/base neutral were requested, Phoenix utilized a method that contained a shortened list , so some of the compounds in the narrative may be non-applicable.

Initial Calibration (Chem04/SIM_0401):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Pentachlorophenol

The following compounds failed to meet the minimum required response factor: None

Continuing Calibration:
Greater than 80% of target compounds met continuing calibraion criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Acenaphthylene, Atrazine, Benzo(a)pyrene

Printed Name Damien Drobinski
Position: Chemist
Date: 4/5/2012

QC Comments: QC Batch 97582 04/03/12 (BB61071, BB61072, BB61073, BB61074, BB61075, BB61076)

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 197840 (Samples: (BB61074, BB61076): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

QC Batch 197747 (Samples: (BB661071, BB61072): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

The LCS and/or LCSD recovery for one or more compounds is below range. A low bias for these compounds is possible. (Compounds listed below)

QC Batch 198243 (Samples: (BB661075): -----

The LCS and/or LCSD recovery for one or more compounds is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Compounds listed below)

Instrument: Chem08 04/04/12-1 (BB61071, BB61072)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: None.

Printed Name Tina Covensky
Position: Chemist
Date: 4/4/2012

Instrument: Chem08 04/05/12-1 (BB61073, BB61074, BB61076)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

Printed Name Tina Covensky
Position: Chemist
Date: 4/5/2012

Instrument: Chem08 04/11/12-1 (BB61075)

S -Side
Initial Calibration(RCPS_0404):
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, 2,2-dichloropropane, Cis-1,3-dichloropropene, Trans-1,3-dichloropropene, Dibromochloromethane, M&p-xylene, O-xylene, Styrene, Trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene, 1,2,3-trichlorobenzene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration. The following compounds had % Deviations: Carbon Disulfide

Printed Name Tina Covensky
Position: Chemist
Date: 4/11/2012

QC Comments: QC Batch 97747 04/05/12 (BB61071, BB61072)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 97840 04/06/12 (BB61074, BB61076)

A blank MS/MSD was analyzed with this batch.

QC Comments: QC Batch 98243 04/12/12 (BB61075)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

April 17, 2012

SDG I.D.: GBB61071

QC (Site Specific)

---------- Sample No: BB61075, QA/QC Batch: 198243 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(131%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(134%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(>150%)

All MSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(>150%)

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB61059, QA/QC Batch: 197840 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(137%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(132%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB61060, QA/QC Batch: 197747 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: Carbon Disulfide(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Dichlorodifluoromethane(69%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6° Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: DAS Contract - CTDOT c/o MGI

Project ~~P.O.~~: 301-145 + 301-40
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 4-2-12

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil/Solid **W**=Wipe **O**=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	Dissolved RCRA 8 Metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
61071	GP-69 GW	GW	4-2-12	2:10pm	X	X	X	X	X	X	X						3	5			2
61072	GP-71 GW	↓	↓	12:41pm	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
61073	GP-73 GW	↓	↓	11:02am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
61074	GP-77 GW	↓	↓	9:11am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
61075	GP-79 GW	↓	↓	7:51am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓
61076	GP-81 GW	↓	↓	6:39am	↓	↓	↓	↓	↓	↓	↓						↓	↓			↓

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/2/12	11:25
[signature]	T. Corlewsky	4-2-12	1437

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☒ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☒ Other General Permit Disch Limits

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Monday, June 11, 2012

Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Sample ID#s: BB91404 - BB91414

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

SDG Comments

June 11, 2012

SDG I.D.: GBB91404

BB91407 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	10:00
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91404

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-9 2-4 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	06/01/12		EK	6010
Arsenic	7.81	0.74	mg/Kg	06/01/12		EK	6010
Barium	79.6	0.37	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	06/01/12		EK	6010
Chromium	13.4	0.37	mg/Kg	06/01/12		EK	6010
Mercury	1.01	0.07	mg/Kg	05/31/12		RS	SW-7471
Lead	142	0.37	mg/Kg	06/01/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.051	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	06/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	94		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/31/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-9 2-4 FT

Phoenix I.D.: BB91404

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	44	ug/Kg	06/02/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	44	ug/Kg	06/02/12		JRB	SW8151
2,4-D	ND	44	ug/Kg	06/02/12		JRB	SW8151
2,4-DB	ND	440	ug/Kg	06/02/12		JRB	SW8151
Dalapon	ND	44	ug/Kg	06/02/12		JRB	SW8151
Dicamba	ND	88	ug/Kg	06/02/12		JRB	SW8151
Dichloroprop	ND	44	ug/Kg	06/02/12		JRB	SW8151
Dinoseb	ND	88	ug/Kg	06/02/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	120		%	06/02/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	92	10	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	87		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	350	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	350	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	69		%	05/31/12		MH	30 - 150 %
% TCMX	69		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.3	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	53	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.3	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.3	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-9 2-4 FT

Phoenix I.D.: BB91404

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	10	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	74		%	06/01/12		KCA	30 - 150 %
% TCMX	70		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	27	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	27	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	110	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Chloromethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	06/01/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-9 2-4 FT

Phoenix I.D.: BB91404

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	5.5	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	92		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	102		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	250	250	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-9 2-4 FT

Phoenix I.D.: BB91404

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	1000	250	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	420	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	920	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	1800	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	650	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	600	250	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	ND	530	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	1600	250	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	1900	250	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	590	250	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Naphthalene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-9 2-4 FT

Phoenix I.D.: BB91404

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	1300	250	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	1700	250	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	350	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	100		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	75		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	94		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	86		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	96		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	64		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C12 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	10:15
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91405

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-10 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	06/01/12		EK	6010
Arsenic	3.93	0.75	mg/Kg	06/01/12		EK	6010
Barium	110	0.37	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.37	0.37	mg/Kg	06/01/12		EK	6010
Chromium	36.5	0.37	mg/Kg	06/01/12		EK	6010
Mercury	1.34	0.06	mg/Kg	05/31/12		RS	SW-7471
Lead	144	0.37	mg/Kg	06/01/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.021	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.011	0.010	mg/L	06/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	89		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-10 1-3 FT

Phoenix I.D.: BB91405

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	93	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	93	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	72		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	180	22	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	78		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	370	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	370	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	80		%	05/31/12		MH	30 - 150 %
% TCMX	84		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.5	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	55	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.5	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.5	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-10 1-3 FT

Phoenix I.D.: BB91405

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	120		%	06/01/12		KCA	30 - 150 %
% TCMX	107		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	28	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	28	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	110	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Chloromethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.3	ug/Kg	06/01/12		R/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-10 1-3 FT

Phoenix I.D.: BB91405

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	33	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	5.6	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	92		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	99		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	102		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	590	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-10 1-3 FT

Phoenix I.D.: BB91405

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	590	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	590	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	260	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	590	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	670	260	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	590	260	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	370	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	3300	260	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	440	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	3200	260	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	5100	260	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	1700	260	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	1600	260	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	390	260	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	ND	550	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	3400	260	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	660	260	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	4500	260	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	1700	260	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Naphthalene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	260	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-10 1-3 FT

Phoenix I.D.: BB91405

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	370	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	2200	260	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	260	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	4000	260	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	370	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	101		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	74		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	93		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	82		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	93		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	63		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	10:51
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91406

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	6010
Arsenic	51.0	0.77	mg/Kg	06/01/12		EK	6010
Barium	52.1	0.39	mg/Kg	06/01/12		EK	6010
Cadmium	1.21	0.39	mg/Kg	06/01/12		EK	6010
Chromium	89.1	0.39	mg/Kg	06/01/12		EK	6010
Mercury	0.57	0.15	mg/Kg	05/31/12		RS	SW-7471
Lead	4950	39	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.013	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.147	0.010	mg/L	06/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	83		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	160	24	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	98		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	67		%	05/31/12		MH	30 - 150 %
% TCMX	66		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	38	38	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/01/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	98		%	06/01/12		KCA	30 - 150 %
% TCMX	63		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
2-Hexanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
4-Methyl-2-pentanone	ND	30	ug/Kg	06/01/12		R/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		R/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Benzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromoform	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Bromomethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chloroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chloroform	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Chloromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	06/01/12		R/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/01/12		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Naphthalene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
o-Xylene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Styrene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		R/J	SW8260
Toluene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		R/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	06/01/12		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	06/01/12		R/J	70 - 130 %
% Bromofluorobenzene	93		%	06/01/12		R/J	70 - 130 %
% Dibromofluoromethane	98		%	06/01/12		R/J	70 - 130 %
% Toluene-d8	102		%	06/01/12		R/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	1000	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	590	280	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	500	280	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	1800	280	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	1600	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	3600	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	770	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	1000	280	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	ND	600	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	2500	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	350	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	350	280	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	3300	280	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	800	280	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Naphthalene	720	280	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-11 1-3 FT

Phoenix I.D.: BB91406

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	2400	280	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	2700	280	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	82		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	83		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	87		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	67		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	11:14
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91407

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-12 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	06/01/12		EK	6010
Arsenic	19.2	0.76	mg/Kg	06/01/12		EK	6010
Barium	111	0.38	mg/Kg	06/01/12		EK	6010
Cadmium	1.42	0.38	mg/Kg	06/01/12		EK	6010
Chromium	37.1	0.38	mg/Kg	06/01/12		EK	6010
Mercury	0.25	0.18	mg/Kg	05/31/12		RS	SW-7471
Lead	3130	38	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.014	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.053	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.063	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	0.0007	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	1.50	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	85		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			05/31/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	98	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	98	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	120	23	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	100		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	65		%	05/31/12		MH	30 - 150 %
% TCMX	62		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	37	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	37	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	37	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	18	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.7	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	57	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	18	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.7	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	18	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	37	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	37	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.7	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	18	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	180	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	180	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	105		%	06/01/12		KCA	30 - 150 %
% TCMX	87		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,1-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,3-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2,2-Dichloropropane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
2-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Chlorotoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	06/02/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/02/12		H/J	SW8260
Acrylonitrile	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Benzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromochloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromodichloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromoform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Bromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon Disulfide	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Carbon tetrachloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chlorobenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloroform	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Chloromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dibromochloromethane	ND	3.5	ug/Kg	06/02/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dibromomethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Ethylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Hexachlorobutadiene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Isopropylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
m&p-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Methyl Ethyl Ketone	ND	35	ug/Kg	06/02/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Methylene chloride	ND	12	ug/Kg	06/02/12		H/J	SW8260
Naphthalene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
n-Propylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
o-Xylene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
p-Isopropyltoluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
sec-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Styrene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
tert-Butylbenzene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrachloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/02/12		H/J	SW8260
Toluene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Total Xylenes	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/02/12		H/J	SW8260
Trichloroethene	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorofluoromethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
Vinyl chloride	ND	5.9	ug/Kg	06/02/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/02/12		H/J	70 - 130 %
% Bromofluorobenzene	89		%	06/02/12		H/J	70 - 130 %
% Dibromofluoromethane	76		%	06/02/12		H/J	70 - 130 %
% Toluene-d8	102		%	06/02/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dichlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dimethylphenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dinitrophenol	ND	620	ug/Kg	06/03/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Chloronaphthalene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Chlorophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Methylnaphthalene	380	270	ug/Kg	06/03/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	270	ug/Kg	06/03/12		KCA	SW 8270
2-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
2-Nitrophenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	06/03/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	270	ug/Kg	06/03/12		KCA	SW 8270
3-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	380	ug/Kg	06/03/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Chloroaniline	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	06/03/12		KCA	SW 8270
4-Nitroaniline	ND	620	ug/Kg	06/03/12		KCA	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Acenaphthene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Acenaphthylene	280	270	ug/Kg	06/03/12		KCA	SW 8270
Acetophenone	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Aniline	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Anthracene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Azobenzene	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Benz(a)anthracene	780	270	ug/Kg	06/03/12		KCA	SW 8270
Benzidine	ND	460	ug/Kg	06/03/12		KCA	SW 8270
Benzo(a)pyrene	650	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(b)fluoranthene	1300	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(ghi)perylene	300	270	ug/Kg	06/03/12		KCA	SW 8270
Benzo(k)fluoranthene	370	270	ug/Kg	06/03/12		KCA	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/03/12		KCA	SW 8270
Benzyl butyl phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Carbazole	ND	580	ug/Kg	06/03/12		KCA	SW 8270
Chrysene	920	270	ug/Kg	06/03/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Dibenzofuran	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Diethyl phthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Dimethylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Di-n-butylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Di-n-octylphthalate	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Fluoranthene	1100	270	ug/Kg	06/03/12		KCA	SW 8270
Fluorene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorobutadiene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Hexachloroethane	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	330	270	ug/Kg	06/03/12		KCA	SW 8270
Isophorone	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Naphthalene	330	270	ug/Kg	06/03/12		KCA	SW 8270
Nitrobenzene	ND	270	ug/Kg	06/03/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	380	ug/Kg	06/03/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-12 1-3 FT

Phoenix I.D.: BB91407

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	06/03/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Pentachloronitrobenzene	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Pentachlorophenol	ND	380	ug/Kg	06/03/12		KCA	SW 8270
Phenanthrene	660	270	ug/Kg	06/03/12		KCA	SW 8270
Phenol	ND	270	ug/Kg	06/03/12		KCA	SW 8270
Pyrene	1100	270	ug/Kg	06/03/12		KCA	SW 8270
Pyridine	ND	380	ug/Kg	06/03/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	85		%	06/03/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	76		%	06/03/12		KCA	15 - 130 %
% 2-Fluorophenol	72		%	06/03/12		KCA	15 - 130 %
% Nitrobenzene-d5	80		%	06/03/12		KCA	15 - 130 %
% Phenol-d5	71		%	06/03/12		KCA	15 - 130 %
% Terphenyl-d14	78		%	06/03/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	11:54
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91408

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-13 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	06/01/12		EK	6010
Arsenic	8.91	0.71	mg/Kg	06/01/12		EK	6010
Barium	36.3	0.36	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	06/01/12		EK	6010
Chromium	122	0.36	mg/Kg	06/01/12		EK	6010
Mercury	0.14	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	1880	36	mg/Kg	06/04/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.042	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.025	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.444	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	90		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	46	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	460	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	92	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	46	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	92	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	86		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	ND	11	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	ND		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	90		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	80		%	05/31/12		MH	30 - 150 %
% TCMX	85		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	35	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	35	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	35	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	35	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	91		%	06/01/12		KCA	30 - 150 %
% TCMX	91		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	26	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	26	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Chloromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.2	ug/Kg	05/31/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	32	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	5.3	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	82		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	101		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,2,4-Trichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,2-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,3-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
1,4-Dichlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4,5-Trichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4,6-Trichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dichlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dimethylphenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,4-Dinitrophenol	ND	590	ug/Kg	06/05/12		DD	SW 8270
2,4-Dinitrotoluene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2,6-Dinitrotoluene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Chloronaphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Chlorophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Methylnaphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	06/05/12		DD	SW 8270
2-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
2-Nitrophenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	06/05/12		DD	SW 8270
3,3'-Dichlorobenzidine	ND	260	ug/Kg	06/05/12		DD	SW 8270
3-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	06/05/12		DD	SW 8270
4-Bromophenyl phenyl ether	ND	370	ug/Kg	06/05/12		DD	SW 8270
4-Chloro-3-methylphenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Chloroaniline	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	06/05/12		DD	SW 8270
4-Nitroaniline	ND	590	ug/Kg	06/05/12		DD	SW 8270
4-Nitrophenol	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Acenaphthene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Acenaphthylene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Acetophenone	ND	260	ug/Kg	06/05/12		DD	SW 8270
Aniline	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Azobenzene	ND	370	ug/Kg	06/05/12		DD	SW 8270
Benz(a)anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzidine	ND	440	ug/Kg	06/05/12		DD	SW 8270
Benzo(a)pyrene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(b)fluoranthene	340	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(ghi)perylene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzo(k)fluoranthene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Benzoic acid	ND	1100	ug/Kg	06/05/12		DD	SW 8270
Benzyl butyl phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroethyl)ether	ND	370	ug/Kg	06/05/12		DD	SW 8270
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	06/05/12		DD	SW 8270
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Carbazole	ND	550	ug/Kg	06/05/12		DD	SW 8270
Chrysene	350	260	ug/Kg	06/05/12		DD	SW 8270
Dibenz(a,h)anthracene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Dibenzofuran	ND	260	ug/Kg	06/05/12		DD	SW 8270
Diethyl phthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Dimethylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Di-n-butylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Di-n-octylphthalate	ND	260	ug/Kg	06/05/12		DD	SW 8270
Fluoranthene	320	260	ug/Kg	06/05/12		DD	SW 8270
Fluorene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorobutadiene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachlorocyclopentadiene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Hexachloroethane	ND	260	ug/Kg	06/05/12		DD	SW 8270
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Isophorone	ND	260	ug/Kg	06/05/12		DD	SW 8270
Naphthalene	ND	260	ug/Kg	06/05/12		DD	SW 8270
Nitrobenzene	ND	260	ug/Kg	06/05/12		DD	SW 8270
N-Nitrosodimethylamine	ND	370	ug/Kg	06/05/12		DD	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-13 1-3 FT

Phoenix I.D.: BB91408

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	06/05/12		DD	SW 8270
N-Nitrosodiphenylamine	ND	370	ug/Kg	06/05/12		DD	SW 8270
Pentachloronitrobenzene	ND	370	ug/Kg	06/05/12		DD	SW 8270
Pentachlorophenol	ND	370	ug/Kg	06/05/12		DD	SW 8270
Phenanthrene	330	260	ug/Kg	06/05/12		DD	SW 8270
Phenol	ND	260	ug/Kg	06/05/12		DD	SW 8270
Pyrene	320	260	ug/Kg	06/05/12		DD	SW 8270
Pyridine	ND	370	ug/Kg	06/05/12		DD	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	06/05/12		DD	15 - 130 %
% 2-Fluorobiphenyl	82		%	06/05/12		DD	15 - 130 %
% 2-Fluorophenol	87		%	06/05/12		DD	15 - 130 %
% Nitrobenzene-d5	92		%	06/05/12		DD	15 - 130 %
% Phenol-d5	84		%	06/05/12		DD	15 - 130 %
% Terphenyl-d14	80		%	06/05/12		DD	15 - 130 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	12:11
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91409

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-14 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	06/01/12		EK	6010
Arsenic	114	0.86	mg/Kg	06/01/12		EK	6010
Barium	77.9	0.43	mg/Kg	06/01/12		EK	6010
Cadmium	0.77	0.43	mg/Kg	06/01/12		EK	6010
Chromium	112	0.43	mg/Kg	06/01/12		EK	6010
Mercury	0.83	0.07	mg/Kg	06/01/12		RS	SW-7471
Lead	5730	43	mg/Kg	06/04/12		EK	6010
Selenium	1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.056	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.150	0.010	mg/L	06/04/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	83		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	50	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	500	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	50	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	78		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	390	24	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	80		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	400	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	400	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	97		%	05/31/12		MH	30 - 150 %
% TCMX	95		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	38	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	85	38	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	19	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	59	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	19	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.9	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	19	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	38	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	38	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.9	ug/Kg	06/01/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	19	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	190	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	190	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	103		%	06/01/12		KCA	30 - 150 %
% TCMX	94		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Chloromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.1	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	90		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	78		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	99		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chloronaphthalene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	670	280	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	280	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	640	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	2000	280	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	1500	280	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	6100	280	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	480	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	5300	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	3400	280	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	3400	280	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1200	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	740	600	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	8100	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	1500	280	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	320	280	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	3700	280	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Naphthalene	530	280	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-14 1-3 FT

Phoenix I.D.: BB91409

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	400	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	3300	280	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	280	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	11000	280	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	400	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	102		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	77		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	93		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	88		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	94		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	71		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	12:43
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91410

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-15 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	06/01/12		EK	6010
Arsenic	19.1	0.72	mg/Kg	06/01/12		EK	6010
Barium	40.7	0.36	mg/Kg	06/01/12		EK	6010
Cadmium	< 0.36	0.36	mg/Kg	06/01/12		EK	6010
Chromium	22.7	0.36	mg/Kg	06/01/12		EK	6010
Mercury	0.05	0.05	mg/Kg	06/01/12		RS	SW-7471
Lead	99.2	0.36	mg/Kg	06/01/12		EK	6010
Selenium	< 1.4	1.4	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	< 0.004	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	< 0.010	0.010	mg/L	05/31/12		LK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	92		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-15 1-3 FT

Phoenix I.D.: BB91410

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	45	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	45	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	45	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	450	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	45	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	90	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	45	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	90	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	91		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	58	11	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	91		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	360	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	360	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	80		%	05/31/12		MH	30 - 150 %
% TCMX	70		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	34	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	34	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	ND	34	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	17	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	54	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	17	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	5.4	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	17	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	34	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	34	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	5.4	ug/Kg	06/01/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	11	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	17	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	170	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	170	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	102		%	06/01/12		KCA	30 - 150 %
% TCMX	85		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	29	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	29	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	110	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Chloromethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.4	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-15 1-3 FT

Phoenix I.D.: BB91410

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	34	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	11	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	5.7	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	86		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	74		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	102		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dichlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dimethylphenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrophenol	ND	560	ug/Kg	05/31/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Chloronaphthalene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Chlorophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Methylnaphthalene	ND	250	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-15 1-3 FT

Phoenix I.D.: BB91410

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	250	ug/Kg	05/31/12		KCA	SW 8270
2-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
2-Nitrophenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	05/31/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	250	ug/Kg	05/31/12		KCA	SW 8270
3-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	350	ug/Kg	05/31/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Chloroaniline	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	05/31/12		KCA	SW 8270
4-Nitroaniline	ND	560	ug/Kg	05/31/12		KCA	SW 8270
4-Nitrophenol	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Acenaphthylene	360	250	ug/Kg	05/31/12		KCA	SW 8270
Acetophenone	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Aniline	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Anthracene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Azobenzene	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Benz(a)anthracene	1200	250	ug/Kg	05/31/12		KCA	SW 8270
Benzidine	ND	420	ug/Kg	05/31/12		KCA	SW 8270
Benzo(a)pyrene	1100	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(b)fluoranthene	2400	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(ghi)perylene	800	250	ug/Kg	05/31/12		KCA	SW 8270
Benzo(k)fluoranthene	570	250	ug/Kg	05/31/12		KCA	SW 8270
Benzoic acid	ND	1000	ug/Kg	05/31/12		KCA	SW 8270
Benzyl butyl phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Carbazole	ND	530	ug/Kg	05/31/12		KCA	SW 8270
Chrysene	1500	250	ug/Kg	05/31/12		KCA	SW 8270
Dibenz(a,h)anthracene	310	250	ug/Kg	05/31/12		KCA	SW 8270
Dibenzofuran	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Diethyl phthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Dimethylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Di-n-butylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Di-n-octylphthalate	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Fluoranthene	1900	250	ug/Kg	05/31/12		KCA	SW 8270
Fluorene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorobutadiene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Hexachloroethane	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	780	250	ug/Kg	05/31/12		KCA	SW 8270
Isophorone	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Naphthalene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Nitrobenzene	ND	250	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	350	ug/Kg	05/31/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-15 1-3 FT

Phoenix I.D.: BB91410

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	05/31/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Pentachloronitrobenzene	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Pentachlorophenol	ND	350	ug/Kg	05/31/12		KCA	SW 8270
Phenanthrene	810	250	ug/Kg	05/31/12		KCA	SW 8270
Phenol	ND	250	ug/Kg	05/31/12		KCA	SW 8270
Pyrene	1600	250	ug/Kg	05/31/12		KCA	SW 8270
Pyridine	ND	350	ug/Kg	05/31/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	104		%	05/31/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	79		%	05/31/12		KCA	15 - 130 %
% 2-Fluorophenol	99		%	05/31/12		KCA	15 - 130 %
% Nitrobenzene-d5	89		%	05/31/12		KCA	15 - 130 %
% Phenol-d5	99		%	05/31/12		KCA	15 - 130 %
% Terphenyl-d14	69		%	05/31/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards,
but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	12:55
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91411

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-20 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	6010
Arsenic	33.9	0.77	mg/Kg	06/01/12		EK	6010
Barium	42.8	0.39	mg/Kg	06/01/12		EK	6010
Cadmium	0.85	0.39	mg/Kg	06/01/12		EK	6010
Chromium	145	0.39	mg/Kg	06/01/12		EK	6010
Mercury	0.30	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	20700	390	mg/Kg	06/04/12		EK	6010
Selenium	< 1.5	1.5	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.005	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.038	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	1.15	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	80		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	52	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	520	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	52	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	52	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	82		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	910	25	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	116		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	74		%	05/31/12		MH	30 - 150 %
% TCMX	64		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	110	39	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/01/12		KCA	SW8081

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	72		%	06/01/12		KCA	30 - 150 %
% TCMX	75		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	4.0	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	33	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	33	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	130	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Chloromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	4.0	ug/Kg	05/31/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	40	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	13	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.7	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	84		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	78		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	98		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Chloronaphthalene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	3300	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	4500	1400	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	3100	1400	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	13000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	2500	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	11000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	19000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	4900	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	6000	1400	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	6000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	3100	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	15000	1400	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	1800	1400	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	25000	1400	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	5100	1400	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Naphthalene	1700	1400	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-20 1-3 FT

Phoenix I.D.: BB91411

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	7500	1400	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	1400	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	25000	1400	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	2100	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	124		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	91		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	94		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	91		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	85		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	92		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	13:20
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91412

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-21 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	06/01/12		EK	6010
Arsenic	11.4	0.78	mg/Kg	06/01/12		EK	6010
Barium	80.7	0.39	mg/Kg	06/01/12		EK	6010
Cadmium	6.95	0.39	mg/Kg	06/01/12		EK	6010
Chromium	20.2	0.39	mg/Kg	06/01/12		EK	6010
Mercury	0.13	0.09	mg/Kg	06/01/12		RS	SW-7471
Lead	1400	3.9	mg/Kg	06/04/12		EK	6010
Selenium	< 1.6	1.6	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.011	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.020	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.024	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	0.0006	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	0.756	0.010	mg/L	05/31/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	85		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	49	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	490	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	97	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	49	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	97	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	91		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	220	12	mg/Kg	05/31/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	05/31/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	05/31/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	380	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	380	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	78		%	05/31/12		MH	30 - 150 %
% TCMX	74		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	74	ug/Kg	06/06/12		KCA	SW8081
4,4' -DDE	ND	120	ug/Kg	06/06/12		KCA	SW8081
4,4' -DDT	ND	74	ug/Kg	06/06/12		KCA	SW8081
a-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Alachlor	ND	37	ug/Kg	06/06/12		KCA	SW8081
Aldrin	ND	12	ug/Kg	06/06/12		KCA	SW8081
b-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Chlordane	ND	120	ug/Kg	06/06/12		KCA	SW8081
d-BHC	ND	37	ug/Kg	06/06/12		KCA	SW8081
Dieldrin	ND	12	ug/Kg	06/06/12		KCA	SW8081
Endosulfan I	ND	37	ug/Kg	06/06/12		KCA	SW8081
Endosulfan II	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endosulfan sulfate	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endrin	ND	92	ug/Kg	06/06/12		KCA	SW8081
Endrin aldehyde	ND	74	ug/Kg	06/06/12		KCA	SW8081
Endrin ketone	ND	74	ug/Kg	06/06/12		KCA	SW8081
g-BHC	ND	12	ug/Kg	06/06/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	23	ug/Kg	06/06/12		KCA	SW8081
Heptachlor epoxide	ND	37	ug/Kg	06/06/12		KCA	SW8081
Methoxychlor	ND	370	ug/Kg	06/06/12		KCA	SW8081
Toxaphene	ND	370	ug/Kg	06/06/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	50		%	06/06/12		KCA	30 - 150 %
% TCMX	70		%	06/06/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	06/01/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	06/01/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	06/01/12		H/J	SW8260
Acetone	ND	120	ug/Kg	06/01/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Chloromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	06/01/12		H/J	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	06/01/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	06/01/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	06/01/12		H/J	SW8260
Toluene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	06/01/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	06/01/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	06/01/12		H/J	70 - 130 %
% Bromofluorobenzene	85		%	06/01/12		H/J	70 - 130 %
% Dibromofluoromethane	124		%	06/01/12		H/J	70 - 130 %
% Toluene-d8	99		%	06/01/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Chloronaphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	6300	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	12000	2700	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	9500	2700	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	50000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	4700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	38000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	77000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	13000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	20000	2700	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	11000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	5900	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	51000	2700	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	6200	2700	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	110000	2700	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	14000	2700	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Naphthalene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-21 1-3 FT

Phoenix I.D.: BB91412

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	8800	2700	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	2700	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	110000	2700	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	3900	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	*Diluted Out		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C10 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

* For Pesticides, due to matrix interference from non target compounds in the sample an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/29/12	13:49
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91413

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 1-3 FT

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	06/01/12		EK	6010
Arsenic	28.0	0.83	mg/Kg	06/01/12		EK	6010
Barium	54.2	0.42	mg/Kg	06/01/12		EK	6010
Cadmium	0.77	0.42	mg/Kg	06/01/12		EK	6010
Chromium	147	0.42	mg/Kg	06/01/12		EK	6010
Mercury	0.26	0.08	mg/Kg	06/01/12		RS	SW-7471
Lead	14600	42	mg/Kg	06/04/12		EK	6010
Selenium	< 1.7	1.7	mg/Kg	06/01/12		EK	6010
SPLP Silver	< 0.010	0.010	mg/L	05/31/12		EK	6010
SPLP Arsenic	0.010	0.004	mg/L	05/31/12		EK	6010
SPLP Barium	0.012	0.010	mg/L	05/31/12		EK	6010
SPLP Cadmium	< 0.005	0.005	mg/L	05/31/12		EK	6010
SPLP Chromium	0.054	0.010	mg/L	05/31/12		EK	6010
SPLP Mercury	< 0.0004	0.0004	mg/L	05/31/12		RS	1312/SW7470
SPLP Lead	3.22	0.10	mg/L	06/01/12		EK	6010
SPLP Selenium	< 0.020	0.020	mg/L	05/31/12		EK	6010
Total Metals Digest	Completed			05/30/12		AG	SW846 - 3050
SPLP Metals Digestion	Completed			05/31/12		X/X	SW846-3005
Percent Solid	81		%	05/30/12		JL	E160.3
Soil Extraction for PCB	Completed			05/30/12		BB/F	SW3545
Soil Extraction for Pesticide	Completed			05/30/12		BB	SW3545
Soil Extraction for SVOA	Completed			05/30/12		BB/F	SW3545
Extraction of CT ETPH	Completed			05/30/12		BS/F	3545
Mercury Digestion	Completed			06/01/12		X/X	SW7471
Soil Extraction for Herbicide	Completed			05/30/12		M/D	SW8151
SPLP Digestion Mercury	Completed			05/31/12		X/X	E1312/SW7470
SPLP Extraction for Metals	Completed			05/30/12		X	EPA 1312
Field Extraction	Completed			05/29/12		JW	SW5035

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
Chlorinated Herbicides							
2,4,5-T	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4,5-TP (Silvex)	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4-D	ND	51	ug/Kg	05/31/12		JRB	SW8151
2,4-DB	ND	510	ug/Kg	05/31/12		JRB	SW8151
Dalapon	ND	51	ug/Kg	05/31/12		JRB	SW8151
Dicamba	ND	100	ug/Kg	05/31/12		JRB	SW8151
Dichloroprop	ND	51	ug/Kg	05/31/12		JRB	SW8151
Dinoseb	ND	100	ug/Kg	05/31/12		JRB	SW8151
QA/QC Surrogates							
% DCAA	84		%	05/31/12		JRB	30 - 150 %
TPH by GC (Extractable Products)							
Ext. Petroleum HC	1200	60	mg/Kg	06/01/12		JRB	CT ETPH/8015
Identification	**		mg/Kg	06/01/12		JRB	CT ETPH/8015
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	06/01/12		JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1221	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1232	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1242	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1248	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1254	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1260	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1262	ND	410	ug/Kg	05/31/12		MH	SW 8082
PCB-1268	ND	410	ug/Kg	05/31/12		MH	SW 8082
QA/QC Surrogates							
% DCBP	71		%	05/31/12		MH	30 - 150 %
% TCMX	74		%	05/31/12		MH	30 - 150 %
Pesticides							
4,4' -DDD	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDE	ND	39	ug/Kg	06/01/12		KCA	SW8081
4,4' -DDT	230	39	ug/Kg	06/01/12		KCA	SW8081
a-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Alachlor	ND	20	ug/Kg	06/01/12		KCA	SW8081
Aldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
b-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Chlordane	ND	61	ug/Kg	06/01/12		KCA	SW8081
d-BHC	ND	20	ug/Kg	06/01/12		KCA	SW8081
Dieldrin	ND	6.1	ug/Kg	06/01/12		KCA	SW8081
Endosulfan I	ND	20	ug/Kg	06/01/12		KCA	SW8081
Endosulfan II	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endosulfan sulfate	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin aldehyde	ND	39	ug/Kg	06/01/12		KCA	SW8081
Endrin ketone	ND	39	ug/Kg	06/01/12		KCA	SW8081
g-BHC	ND	6.1	ug/Kg	06/01/12		KCA	SW8081

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
Heptachlor	ND	12	ug/Kg	06/01/12		KCA	SW8081
Heptachlor epoxide	ND	20	ug/Kg	06/01/12		KCA	SW8081
Methoxychlor	ND	200	ug/Kg	06/01/12		KCA	SW8081
Toxaphene	ND	200	ug/Kg	06/01/12		KCA	SW8081
QA/QC Surrogates							
% DCBP	74		%	06/01/12		KCA	30 - 150 %
% TCMX	81		%	06/01/12		KCA	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1,1-Trichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260
1,1,2-Trichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,1-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,3-Trichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,2-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,3-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
1,4-Dichlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2,2-Dichloropropane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2-Chlorotoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
2-Hexanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
2-Isopropyltoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
4-Chlorotoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
4-Methyl-2-pentanone	ND	31	ug/Kg	05/31/12		H/J	SW8260
Acetone	ND	120	ug/Kg	05/31/12		H/J	SW8260
Acrylonitrile	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Benzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromochloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromodichloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromoform	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Bromomethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Carbon Disulfide	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Carbon tetrachloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chlorobenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chloroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chloroform	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Chloromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Dibromochloromethane	ND	3.7	ug/Kg	05/31/12		H/J	SW8260

Parameter	Result	RL	Units	Date	Time	By	Reference
Dibromoethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Dibromomethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Dichlorodifluoromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Ethylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Hexachlorobutadiene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Isopropylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
m&p-Xylene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Methyl Ethyl Ketone	ND	37	ug/Kg	05/31/12		H/J	SW8260
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Methylene chloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Naphthalene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
n-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
n-Propylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
o-Xylene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
p-Isopropyltoluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
sec-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Styrene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
tert-Butylbenzene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Tetrachloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Tetrahydrofuran (THF)	ND	12	ug/Kg	05/31/12		H/J	SW8260
Toluene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Total Xylenes	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	05/31/12		H/J	SW8260
Trichloroethene	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Trichlorofluoromethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Trichlorotrifluoroethane	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
Vinyl chloride	ND	6.2	ug/Kg	05/31/12		H/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	102		%	05/31/12		H/J	70 - 130 %
% Bromofluorobenzene	82		%	05/31/12		H/J	70 - 130 %
% Dibromofluoromethane	80		%	05/31/12		H/J	70 - 130 %
% Toluene-d8	97		%	05/31/12		H/J	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,2,4-Trichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,2-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,3-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
1,4-Dichlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4,5-Trichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4,6-Trichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dichlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dimethylphenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrophenol	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
2,4-Dinitrotoluene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2,6-Dinitrotoluene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Chloronaphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Chlorophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Methylnaphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
2-Methylphenol (o-cresol)	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
2-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
2-Nitrophenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
3-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
4-Chloro-3-methylphenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Chloroaniline	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
4-Nitroaniline	ND	6500	ug/Kg	06/02/12		KCA	SW 8270
4-Nitrophenol	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Acenaphthylene	5600	2800	ug/Kg	06/02/12		KCA	SW 8270
Acetophenone	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Aniline	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Anthracene	4100	2800	ug/Kg	06/02/12		KCA	SW 8270
Azobenzene	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Benz(a)anthracene	20000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzidine	ND	4900	ug/Kg	06/02/12		KCA	SW 8270
Benzo(a)pyrene	16000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(b)fluoranthene	27000	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(ghi)perylene	6500	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzo(k)fluoranthene	9300	2800	ug/Kg	06/02/12		KCA	SW 8270
Benzoic acid	ND	12000	ug/Kg	06/02/12		KCA	SW 8270
Benzyl butyl phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Carbazole	ND	6100	ug/Kg	06/02/12		KCA	SW 8270
Chrysene	21000	2800	ug/Kg	06/02/12		KCA	SW 8270
Dibenz(a,h)anthracene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Dibenzofuran	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Diethyl phthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Dimethylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Di-n-butylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Di-n-octylphthalate	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Fluoranthene	36000	2800	ug/Kg	06/02/12		KCA	SW 8270
Fluorene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorobutadiene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachlorocyclopentadiene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Hexachloroethane	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	7300	2800	ug/Kg	06/02/12		KCA	SW 8270
Isophorone	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Naphthalene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Nitrobenzene	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodimethylamine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: GP-22 1-3 FT

Phoenix I.D.: BB91413

Parameter	Result	RL	Units	Date	Time	By	Reference
N-Nitrosodi-n-propylamine	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
N-Nitrosodiphenylamine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Pentachloronitrobenzene	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Pentachlorophenol	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
Phenanthrene	11000	2800	ug/Kg	06/02/12		KCA	SW 8270
Phenol	ND	2800	ug/Kg	06/02/12		KCA	SW 8270
Pyrene	32000	2800	ug/Kg	06/02/12		KCA	SW 8270
Pyridine	ND	4100	ug/Kg	06/02/12		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorobiphenyl	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% 2-Fluorophenol	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Nitrobenzene-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Phenol-d5	*Diluted Out		%	06/02/12		KCA	15 - 130 %
% Terphenyl-d14	*Diluted Out		%	06/02/12		KCA	15 - 130 %

Comments:

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C14 to C36 range. The sample was quantitated against a C9-C36 standard.

* Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the semivolatile analysis.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

All soils and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 11, 2012

FOR: Attn: Ms. Jane Witherell
Maguire Group
2080 Silas Deane Highway
Rocky Hill, CT 06067

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		05/29/12	0:00
Location Code:	MAGU-DAS	Received by:	LB	05/30/12	15:20
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBB91404
Phoenix ID: BB91414

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-15

Parameter	Result	RL	Units	Date	Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,1,1-Trichloroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	05/31/12		H/T	SW8260
1,1,2-Trichloroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,1-Dichloroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,1-Dichloroethene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,1-Dichloropropene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2,3-Trichlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2,3-Trichloropropane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2,4-Trichlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2,4-Trimethylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2-Dichlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,2-Dichloroethane	ND	0.60	ug/L	05/31/12		H/T	SW8260
1,2-Dichloropropane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,3,5-Trimethylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,3-Dichlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,3-Dichloropropane	ND	1.0	ug/L	05/31/12		H/T	SW8260
1,4-Dichlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
2,2-Dichloropropane	ND	1.0	ug/L	05/31/12		H/T	SW8260
2-Chlorotoluene	ND	1.0	ug/L	05/31/12		H/T	SW8260
2-Hexanone	ND	5.0	ug/L	05/31/12		H/T	SW8260
2-Isopropyltoluene	ND	1.0	ug/L	05/31/12		H/T	SW8260
4-Chlorotoluene	ND	1.0	ug/L	05/31/12		H/T	SW8260
4-Methyl-2-pentanone	ND	5.0	ug/L	05/31/12		H/T	SW8260
Acetone	ND	25	ug/L	05/31/12		H/T	SW8260

Project ID: METRO NORTH RAILROAD CATENARY PROJECT
Client ID: TB-15

Phoenix I.D.: BB91414

Parameter	Result	RL	Units	Date	Time	By	Reference
Acrylonitrile	ND	5.0	ug/L	05/31/12		H/T	SW8260
Benzene	ND	0.70	ug/L	05/31/12		H/T	SW8260
Bromobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Bromochloromethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Bromodichloromethane	ND	0.50	ug/L	05/31/12		H/T	SW8260
Bromoform	ND	1.0	ug/L	05/31/12		H/T	SW8260
Bromomethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Carbon Disulfide	ND	5.0	ug/L	05/31/12		H/T	SW8260
Carbon tetrachloride	ND	1.0	ug/L	05/31/12		H/T	SW8260
Chlorobenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Chloroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Chloroform	ND	1.0	ug/L	05/31/12		H/T	SW8260
Chloromethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
cis-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		H/T	SW8260
cis-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		H/T	SW8260
Dibromochloromethane	ND	0.50	ug/L	05/31/12		H/T	SW8260
Dibromoethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Dibromomethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Dichlorodifluoromethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Ethylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Hexachlorobutadiene	ND	0.40	ug/L	05/31/12		H/T	SW8260
Isopropylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
m&p-Xylene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Methyl ethyl ketone	ND	5.0	ug/L	05/31/12		H/T	SW8260
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	05/31/12		H/T	SW8260
Methylene chloride	ND	1.0	ug/L	05/31/12		H/T	SW8260
Naphthalene	ND	1.0	ug/L	05/31/12		H/T	SW8260
n-Butylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
n-Propylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
o-Xylene	ND	1.0	ug/L	05/31/12		H/T	SW8260
p-Isopropyltoluene	ND	1.0	ug/L	05/31/12		H/T	SW8260
sec-Butylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Styrene	ND	1.0	ug/L	05/31/12		H/T	SW8260
tert-Butylbenzene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Tetrachloroethene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Tetrahydrofuran (THF)	ND	5.0	ug/L	05/31/12		H/T	SW8260
Toluene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Total Xylenes	ND	1.0	ug/L	05/31/12		H/T	SW8260
trans-1,2-Dichloroethene	ND	1.0	ug/L	05/31/12		H/T	SW8260
trans-1,3-Dichloropropene	ND	0.50	ug/L	05/31/12		H/T	SW8260
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	05/31/12		H/T	SW8260
Trichloroethene	ND	1.0	ug/L	05/31/12		H/T	SW8260
Trichlorofluoromethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Trichlorotrifluoroethane	ND	1.0	ug/L	05/31/12		H/T	SW8260
Vinyl chloride	ND	1.0	ug/L	05/31/12		H/T	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	05/31/12		H/T	70 - 130 %
% Bromofluorobenzene	101		%	05/31/12		H/T	70 - 130 %
% Dibromofluoromethane	88		%	05/31/12		H/T	70 - 130 %
% Toluene-d8	103		%	05/31/12		H/T	70 - 130 %

Project ID: METRO NORTH RAILROAD CATENARY PROJECT

Client ID: TB-15

Phoenix I.D.: BB91414

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

TRIP BLANK INCLUDED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 11, 2012

Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 11, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201639, QC Sample No: BB90808 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - SPLP Extraction													
Arsenic	BDL	0.004	0.004	NC	104	106	1.9	108	104	3.8	75 - 125	20	
Barium	BDL	0.023	0.023	NC	102	104	1.9	105	102	2.9	75 - 125	20	
Cadmium	BDL	<0.005	<0.005	NC	106	108	1.9	109	106	2.8	75 - 125	20	
Chromium	BDL	<0.010	<0.010	NC	101	104	2.9	105	102	2.9	75 - 125	20	
Lead	BDL	0.019	0.019	NC	101	103	2.0	104	101	2.9	75 - 125	20	
Selenium	BDL	<0.020	<0.020	NC	107	108	0.9	110	109	0.9	75 - 125	20	
Silver	BDL	<0.010	<0.010	NC	99.9	101	1.1	104	100	3.9	75 - 125	20	
QA/QC Batch 201720, QC Sample No: BB91030 (BB91404, BB91405, BB91406, BB91407)													
Mercury - Soil	BDL	0.55	0.37	NC	97.0	105	7.9	83.0	69.7	17.4	70 - 130	30	m
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201722, QC Sample No: BB91197 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Water	BDL	0.0004	0.0003	NC	93.0	93.8	0.9	92.2	87.9	4.8	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201811, QC Sample No: BB91409 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
Mercury - Soil	BDL	0.83	0.39	72.1	111	108	2.7	NR	NR	NC	70 - 130	30	r
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 201676, QC Sample No: BB91705 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)													
ICP Metals - Soil													
Arsenic	BDL	3.86	3.95	NC	86.2	87.0	0.9	90.8	90.6	0.2	75 - 125	30	
Barium	BDL	76.7	77.4	0.90	101	99.3	1.7	NC	NC	NC	75 - 125	30	
Cadmium	BDL	0.27	0.52	NC	88.8	88.3	0.6	91.7	91.8	0.1	75 - 125	30	
Chromium	BDL	17.2	15.5	10.4	92.7	93.6	1.0	101	102	1.0	75 - 125	30	
Lead	BDL	158	152	3.90	88.5	90.3	2.0	NC	NC	NC	75 - 125	30	
Selenium	BDL	<1.6	<1.7	NC	89.4	90.0	0.7	81.7	82.4	0.9	75 - 125	30	
Silver	BDL	<0.41	<0.42	NC	89.8	90.9	1.2	95.6	95.5	0.1	75 - 125	30	

m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 11, 2012

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 201595, QC Sample No: BB90234 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	45	35	25.0				40 - 140	30	l
PCB-1221	ND							40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND							40 - 140	30	
PCB-1254	ND							40 - 140	30	
PCB-1260	ND	41	34	18.7				40 - 140	30	l
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	104	37	31	17.6				30 - 150	30	
% TCMX (Surrogate Rec)	91	40	33	19.2				30 - 150	30	
QA/QC Batch 201579, QC Sample No: BB90759 (BB91404, BB91405)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	115	92	22.2	84	93	10.2	50 - 150	30	
% n-Pentacosane	66	107	89	18.4	76	83	8.8	50 - 150	30	
QA/QC Batch 201601, QC Sample No: BB91037 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Chlorinated Herbicides - Soil										
2,4,5-T	ND	82	82	0.0	76	81	6.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	85	86	1.2	85	84	1.2	40 - 140	30	
2,4-D	ND	95	93	2.1	99	106	6.8	40 - 140	30	
2,4-DB	ND	60	57	5.1	65	63	3.1	40 - 140	30	
Dalapon	ND	54	62	13.8	Intf	Intf	NC	40 - 140	30	
Dicamba	ND	116	105	10.0	117	111	5.3	40 - 140	30	
Dichloroprop	ND	85	85	0.0	75	74	1.3	40 - 140	30	
Dinoseb	ND	70	78	10.8	69	68	1.5	40 - 140	30	
% DCAA (Surrogate Rec)	83	72	72	0.0	74	72	2.7	30 - 150	30	
QA/QC Batch 201594, QC Sample No: BB91093 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)										
Semivolatiles - Soil										
1,2,4,5-Tetrachlorobenzene	ND	83	81	2.4	83	82	1.2	30 - 130	30	
1,2,4-Trichlorobenzene	ND	77	76	1.3	78	78	0.0	30 - 130	30	
1,2-Dichlorobenzene	ND	77	77	0.0	79	79	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	75	75	0.0	76	77	1.3	30 - 130	30	
1,4-Dichlorobenzene	ND	76	76	0.0	77	77	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	86	87	1.2	95	95	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	83	82	1.2	94	94	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	86	85	1.2	91	91	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	69	62	10.7	72	70	2.8	30 - 130	30	
2,4-Dinitrophenol	ND	<5	<5	NC	18	11	48.3	30 - 130	30	l,m,r

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2,4-Dinitrotoluene	ND	90	89	1.1	95	94	1.1	30 - 130	30	
2,6-Dinitrotoluene	ND	89	88	1.1	95	95	0.0	30 - 130	30	
2-Chloronaphthalene	ND	81	81	0.0	85	86	1.2	30 - 130	30	
2-Chlorophenol	ND	79	79	0.0	85	85	0.0	30 - 130	30	
2-Methylnaphthalene	ND	80	81	1.2	83	82	1.2	30 - 130	30	
2-Methylphenol (o-cresol)	ND	80	80	0.0	84	84	0.0	30 - 130	30	
2-Nitroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
2-Nitrophenol	ND	77	74	4.0	92	91	1.1	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	80	80	0.0	87	86	1.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
3-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	8.5	8.2	3.6	71	49	36.7	30 - 130	30	l,r
4-Bromophenyl phenyl ether	ND	85	85	0.0	89	89	0.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	88	85	3.5	94	93	1.1	30 - 130	30	
4-Chloroaniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
4-Chlorophenyl phenyl ether	ND	86	85	1.2	89	90	1.1	30 - 130	30	
4-Nitroaniline	ND	99	98	1.0	105	105	0.0	30 - 130	30	
4-Nitrophenol	ND	86	83	3.6	99	96	3.1	30 - 130	30	
Acenaphthene	ND	80	80	0.0	85	85	0.0	30 - 130	30	
Acenaphthylene	ND	83	83	0.0	88	88	0.0	30 - 130	30	
Acetophenone	ND	78	77	1.3	83	83	0.0	30 - 130	30	
Aniline	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Anthracene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Azobenzene	ND	80	79	1.3	87	89	2.3	30 - 130	30	
Benz(a)anthracene	ND	87	87	0.0	95	95	0.0	30 - 130	30	
Benzidine	ND	41	43	4.8	24	33	31.6	30 - 130	30	m,r
Benzo(a)pyrene	ND	82	82	0.0	91	91	0.0	30 - 130	30	
Benzo(b)fluoranthene	ND	88	89	1.1	101	103	2.0	30 - 130	30	
Benzo(ghi)perylene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Benzo(k)fluoranthene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Benzyl butyl phthalate	ND	84	84	0.0	96	96	0.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	82	80	2.5	87	89	2.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	72	72	0.0	79	80	1.3	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	77	77	0.0	90	94	4.3	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	82	82	0.0	93	95	2.1	30 - 130	30	
Carbazole	ND	117	113	3.5	129	129	0.0	30 - 130	30	
Chrysene	ND	84	84	0.0	91	91	0.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	95	93	2.1	84	91	8.0	30 - 130	30	
Dibenzofuran	ND	83	83	0.0	87	88	1.1	30 - 130	30	
Diethyl phthalate	ND	86	88	2.3	90	92	2.2	30 - 130	30	
Dimethylphthalate	ND	85	84	1.2	89	90	1.1	30 - 130	30	
Di-n-butylphthalate	ND	82	82	0.0	87	89	2.3	30 - 130	30	
Di-n-octylphthalate	ND	85	86	1.2	95	99	4.1	30 - 130	30	
Fluoranthene	ND	86	85	1.2	94	94	0.0	30 - 130	30	
Fluorene	ND	85	84	1.2	89	89	0.0	30 - 130	30	
Hexachlorobenzene	ND	82	82	0.0	89	89	0.0	30 - 130	30	
Hexachlorobutadiene	ND	81	78	3.8	81	81	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	85	81	4.8	63	34	59.8	30 - 130	30	r
Hexachloroethane	ND	80	75	6.5	79	78	1.3	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	91	90	1.1	76	82	7.6	30 - 130	30	
Isophorone	ND	83	82	1.2	87	89	2.3	30 - 130	30	
Naphthalene	ND	78	97	21.7	81	82	1.2	30 - 130	30	
Nitrobenzene	ND	79	79	0.0	86	87	1.2	30 - 130	30	

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
N-Nitrosodimethylamine	ND	83	75	10.1	84	80	4.9	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	81	77	5.1	85	79	7.3	30 - 130	30	
N-Nitrosodiphenylamine	ND	108	107	0.9	111	112	0.9	30 - 130	30	
Pentachloronitrobenzene	ND	>150	>150	NC	>150	>150	NC	30 - 130	30	l,m
Pentachlorophenol	ND	27	26	3.8	87	84	3.5	30 - 130	30	l
Phenanthrene	ND	85	85	0.0	94	94	0.0	30 - 130	30	
Phenol	ND	80	81	1.2	87	87	0.0	30 - 130	30	
Pyrene	ND	88	87	1.1	96	96	0.0	30 - 130	30	
Pyridine	ND	63	65	3.1	67	68	1.5	30 - 130	30	
% 2,4,6-Tribromophenol	73	84	82	2.4	99	101	2.0	15 - 130	30	
% 2-Fluorobiphenyl	65	78	78	0.0	82	83	1.2	30 - 130	30	
% 2-Fluorophenol	64	76	77	1.3	83	83	0.0	15 - 130	30	
% Nitrobenzene-d5	69	80	80	0.0	87	87	0.0	30 - 130	30	
% Phenol-d5	66	79	80	1.3	86	85	1.2	15 - 130	30	
% Terphenyl-d14	76	90	89	1.1	91	91	0.0	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 201947, QC Sample No: BB91147 (BB91412)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	96	99	3.1	93	89	4.4	70 - 130	30	
1,1,1-Trichloroethane	ND	95	118	21.6	93	110	16.7	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	95	100	5.1	104	104	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	100	102	2.0	98	92	6.3	70 - 130	30	
1,1-Dichloroethane	ND	95	122	24.9	92	113	20.5	70 - 130	30	
1,1-Dichloroethene	ND	113	109	3.6	112	107	4.6	70 - 130	30	
1,1-Dichloropropene	ND	89	122	31.3	90	84	6.9	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	94	103	9.1	92	106	14.1	70 - 130	30	
1,2,3-Trichloropropane	ND	114	121	6.0	111	113	1.8	70 - 130	30	
1,2,4-Trichlorobenzene	ND	92	94	2.2	98	104	5.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	109	109	0.0	110	105	4.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	90	99	9.5	83	91	9.2	70 - 130	30	
1,2-Dichlorobenzene	ND	98	96	2.1	100	99	1.0	70 - 130	30	
1,2-Dichloroethane	ND	93	96	3.2	96	91	5.3	70 - 130	30	
1,2-Dichloropropane	ND	100	101	1.0	100	94	6.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	111	109	1.8	112	105	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	98	95	3.1	102	97	5.0	70 - 130	30	
1,3-Dichloropropane	ND	100	104	3.9	101	95	6.1	70 - 130	30	
1,4-Dichlorobenzene	ND	100	96	4.1	104	99	4.9	70 - 130	30	
2,2-Dichloropropane	ND	94	115	20.1	86	103	18.0	70 - 130	30	
2-Chlorotoluene	ND	101	97	4.0	104	96	8.0	70 - 130	30	
2-Hexanone	ND	60	68	12.5	43	45	4.5	70 - 130	30	l,m
2-Isopropyltoluene	ND	112	108	3.6	108	102	5.7	70 - 130	30	
4-Chlorotoluene	ND	103	100	3.0	109	103	5.7	70 - 130	30	
4-Methyl-2-pentanone	ND	80	87	8.4	75	79	5.2	70 - 130	30	
Acetone	ND	95	104	9.0	46	40	14.0	70 - 130	30	m
Acrylonitrile	ND	87	121	32.7	83	113	30.6	70 - 130	30	r
Benzene	ND	101	103	2.0	102	97	5.0	70 - 130	30	
Bromobenzene	ND	103	101	2.0	106	99	6.8	70 - 130	30	
Bromochloromethane	ND	86	120	33.0	85	118	32.5	70 - 130	30	r
Bromodichloromethane	ND	95	95	0.0	94	90	4.3	70 - 130	30	
Bromoform	ND	148	>150	NC	141	139	1.4	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromomethane	ND	137	122	11.6	81	71	13.2	70 - 130	30	l
Carbon Disulfide	ND	108	105	2.8	95	90	5.4	70 - 130	30	
Carbon tetrachloride	ND	91	107	16.2	83	102	20.5	70 - 130	30	
Chlorobenzene	ND	102	100	2.0	105	98	6.9	70 - 130	30	
Chloroethane	ND	125	115	8.3	84	44	62.5	70 - 130	30	m,r
Chloroform	ND	93	119	24.5	90	111	20.9	70 - 130	30	
Chloromethane	ND	100	103	3.0	95	97	2.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	90	124	31.8	87	119	31.1	70 - 130	30	r
cis-1,3-Dichloropropene	ND	93	96	3.2	92	90	2.2	70 - 130	30	
Dibromochloromethane	ND	95	97	2.1	88	87	1.1	70 - 130	30	
Dibromoethane	ND	95	95	0.0	96	92	4.3	70 - 130	30	
Dibromomethane	ND	95	99	4.1	96	92	4.3	70 - 130	30	
Dichlorodifluoromethane	ND	110	93	16.7	102	91	11.4	70 - 130	30	
Ethylbenzene	ND	106	100	5.8	107	97	9.8	70 - 130	30	
Hexachlorobutadiene	ND	99	93	6.3	102	105	2.9	70 - 130	30	
Isopropylbenzene	ND	119	113	5.2	119	109	8.8	70 - 130	30	
m&p-Xylene	ND	111	106	4.6	113	102	10.2	70 - 130	30	
Methyl ethyl ketone	ND	69	94	30.7	<40	46	NC	70 - 130	30	l,m,r
Methyl t-butyl ether (MTBE)	ND	106	111	4.6	101	101	0.0	70 - 130	30	
Methylene chloride	ND	105	106	0.9	103	101	2.0	70 - 130	30	
Naphthalene	ND	100	116	14.8	94	111	16.6	70 - 130	30	
n-Butylbenzene	ND	106	100	5.8	110	103	6.6	70 - 130	30	
n-Propylbenzene	ND	104	97	7.0	111	101	9.4	70 - 130	30	
o-Xylene	ND	106	102	3.8	103	97	6.0	70 - 130	30	
p-Isopropyltoluene	ND	110	104	5.6	108	101	6.7	70 - 130	30	
sec-Butylbenzene	ND	110	104	5.6	115	105	9.1	70 - 130	30	
Styrene	ND	140	135	3.6	137	123	10.8	70 - 130	30	l,m
tert-Butylbenzene	ND	106	100	5.8	106	99	6.8	70 - 130	30	
Tetrachloroethene	ND	101	98	3.0	NC	NC	NC	70 - 130	30	
Tetrahydrofuran (THF)	ND	82	111	30.1	83	105	23.4	70 - 130	30	
Toluene	ND	102	101	1.0	103	94	9.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	109	2.7	110	107	2.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	94	96	2.1	95	93	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	98	104	5.9	87	86	1.2	70 - 130	30	
Trichloroethene	ND	102	100	2.0	100	92	8.3	70 - 130	30	
Trichlorofluoromethane	ND	125	121	3.3	108	102	5.7	70 - 130	30	
Trichlorotrifluoroethane	ND	117	111	5.3	113	104	8.3	70 - 130	30	
Vinyl chloride	ND	117	112	4.4	106	98	7.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	97	100	3.0	98	99	1.0	70 - 130	30	
% Bromofluorobenzene	91	92	89	3.3	93	90	3.3	70 - 130	30	
% Dibromofluoromethane	119	82	125	41.5	79	125	45.1	70 - 130	30	r
% Toluene-d8	99	99	99	0.0	100	96	4.1	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201972, QC Sample No: BB91269 (BB91414)

Volatiles - Water

1,1,1,2-Tetrachloroethane	ND	90	95	5.4	94	94	0.0	70 - 130	30
1,1,1-Trichloroethane	ND	97	104	7.0	105	101	3.9	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	122	118	3.3	120	115	4.3	70 - 130	30
1,1,2-Trichloroethane	ND	105	105	0.0	104	100	3.9	70 - 130	30
1,1-Dichloroethane	ND	102	109	6.6	110	105	4.7	70 - 130	30
1,1-Dichloroethene	ND	88	94	6.6	101	96	5.1	70 - 130	30

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloropropene	ND	109	116	6.2	116	109	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	114	112	1.8	102	101	1.0	70 - 130	30	
1,2,3-Trichloropropane	ND	106	106	0.0	107	107	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	111	111	0.0	105	102	2.9	70 - 130	30	
1,2,4-Trimethylbenzene	ND	108	111	2.7	109	103	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	110	108	1.8	102	98	4.0	70 - 130	30	
1,2-Dichlorobenzene	ND	93	93	0.0	93	90	3.3	70 - 130	30	
1,2-Dichloroethane	ND	121	123	1.6	128	121	5.6	70 - 130	30	
1,2-Dichloropropane	ND	108	113	4.5	113	107	5.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	109	110	0.9	108	105	2.8	70 - 130	30	
1,3-Dichlorobenzene	ND	100	103	3.0	103	100	3.0	70 - 130	30	
1,3-Dichloropropane	ND	125	121	3.3	120	118	1.7	70 - 130	30	
1,4-Dichlorobenzene	ND	77	83	7.5	85	83	2.4	70 - 130	30	
2,2-Dichloropropane	ND	65	68	4.5	54	51	5.7	70 - 130	30	l,m
2-Chlorotoluene	ND	111	111	0.0	111	106	4.6	70 - 130	30	
2-Hexanone	ND	133	127	4.6	124	122	1.6	70 - 130	30	l
2-Isopropyltoluene	ND	99	104	4.9	100	97	3.0	70 - 130	30	
4-Chlorotoluene	ND	105	107	1.9	109	104	4.7	70 - 130	30	
4-Methyl-2-pentanone	ND	118	113	4.3	109	107	1.9	70 - 130	30	
Acetone	ND	125	111	11.9	124	122	1.6	70 - 130	30	
Acrylonitrile	ND	111	113	1.8	112	101	10.3	70 - 130	30	
Benzene	ND	106	112	5.5	112	105	6.5	70 - 130	30	
Bromobenzene	ND	115	117	1.7	114	108	5.4	70 - 130	30	
Bromochloromethane	ND	96	100	4.1	101	97	4.0	70 - 130	30	
Bromodichloromethane	ND	102	106	3.8	109	103	5.7	70 - 130	30	
Bromoform	ND	76	75	1.3	76	75	1.3	70 - 130	30	
Bromomethane	ND	41	62	40.8	84	87	3.5	70 - 130	30	l,r
Carbon Disulfide	ND	89	96	7.6	98	94	4.2	70 - 130	30	
Carbon tetrachloride	ND	102	107	4.8	113	107	5.5	70 - 130	30	
Chlorobenzene	ND	77	83	7.5	86	83	3.6	70 - 130	30	
Chloroethane	ND	90	101	11.5	115	103	11.0	70 - 130	30	
Chloroform	ND	101	104	2.9	108	103	4.7	70 - 130	30	
Chloromethane	ND	89	95	6.5	116	111	4.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	96	103	7.0	100	97	3.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	96	97	1.0	96	92	4.3	70 - 130	30	
Dibromochloromethane	ND	116	112	3.5	115	109	5.4	70 - 130	30	
Dibromoethane	ND	105	104	1.0	106	101	4.8	70 - 130	30	
Dibromomethane	ND	101	108	6.7	112	107	4.6	70 - 130	30	
Dichlorodifluoromethane	ND	67	71	5.8	108	105	2.8	70 - 130	30	l
Ethylbenzene	ND	69	74	7.0	73	71	2.8	70 - 130	30	l
Hexachlorobutadiene	ND	99	104	4.9	91	93	2.2	70 - 130	30	
Isopropylbenzene	ND	105	109	3.7	108	104	3.8	70 - 130	30	
m&p-Xylene	ND	77	81	5.1	81	79	2.5	70 - 130	30	
Methyl ethyl ketone	ND	96	101	5.1	123	124	0.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	116	112	3.5	110	106	3.7	70 - 130	30	
Methylene chloride	ND	79	83	4.9	85	82	3.6	70 - 130	30	
Naphthalene	ND	127	124	2.4	116	115	0.9	70 - 130	30	
n-Butylbenzene	ND	106	109	2.8	104	101	2.9	70 - 130	30	
n-Propylbenzene	ND	95	98	3.1	99	96	3.1	70 - 130	30	
o-Xylene	ND	78	80	2.5	80	77	3.8	70 - 130	30	
p-Isopropyltoluene	ND	110	115	4.4	106	104	1.9	70 - 130	30	
sec-Butylbenzene	ND	99	103	4.0	103	100	3.0	70 - 130	30	
Styrene	ND	69	71	2.9	68	67	1.5	70 - 130	30	l,m

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
tert-Butylbenzene	ND	106	109	2.8	108	103	4.7	70 - 130	30	
Tetrachloroethene	ND	106	111	4.6	110	106	3.7	70 - 130	30	
Tetrahydrofuran (THF)	ND	117	123	5.0	117	118	0.9	70 - 130	30	
Toluene	ND	97	102	5.0	100	94	6.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	92	99	7.3	102	97	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	96	95	1.0	94	88	6.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	103	90	13.5	90	98	8.5	70 - 130	30	
Trichloroethene	ND	96	102	6.1	100	94	6.2	70 - 130	30	
Trichlorofluoromethane	ND	97	107	9.8	111	105	5.6	70 - 130	30	
Trichlorotrifluoroethane	ND	80	89	10.7	86	84	2.4	70 - 130	30	
Vinyl chloride	ND	86	94	8.9	110	105	4.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	104	101	2.9	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	103	118	117	0.9	117	118	0.9	70 - 130	30	
% Dibromofluoromethane	88	88	89	1.1	88	89	1.1	70 - 130	30	
% Toluene-d8	102	102	103	1.0	102	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201678, QC Sample No: BB91410 (BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	66	72	8.7	92	78	16.5	50 - 150	30	
% n-Pentacosane	71	77	81	5.1	99	86	14.1	50 - 150	30	

QA/QC Batch 201943, QC Sample No: BB91644 (BB91404, BB91405, BB91406)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	104	102	1.9	99	104	4.9	70 - 130	30	
1,1,1-Trichloroethane	ND	101	98	3.0	99	115	15.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	90	84	6.9	95	100	5.1	70 - 130	30	
1,1,2-Trichloroethane	ND	103	97	6.0	100	105	4.9	70 - 130	30	
1,1-Dichloroethane	ND	98	117	17.7	97	130	29.1	70 - 130	30	
1,1-Dichloroethene	ND	100	93	7.3	98	107	8.8	70 - 130	30	
1,1-Dichloropropene	ND	96	94	2.1	97	110	12.6	70 - 130	30	
1,2,3-Trichlorobenzene	ND	82	92	11.5	87	102	15.9	70 - 130	30	
1,2,3-Trichloropropane	ND	112	87	25.1	103	91	12.4	70 - 130	30	
1,2,4-Trichlorobenzene	ND	74	81	9.0	86	99	14.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	89	91	2.2	96	101	5.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	111	105	5.6	94	103	9.1	70 - 130	30	
1,2-Dichlorobenzene	ND	90	88	2.2	95	99	4.1	70 - 130	30	
1,2-Dichloroethane	ND	102	97	5.0	99	106	6.8	70 - 130	30	
1,2-Dichloropropane	ND	100	98	2.0	100	103	3.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	91	93	2.2	96	100	4.1	70 - 130	30	
1,3-Dichlorobenzene	ND	87	87	0.0	95	101	6.1	70 - 130	30	
1,3-Dichloropropane	ND	100	94	6.2	97	101	4.0	70 - 130	30	
1,4-Dichlorobenzene	ND	84	84	0.0	94	99	5.2	70 - 130	30	
2,2-Dichloropropane	ND	90	95	5.4	90	110	20.0	70 - 130	30	
2-Chlorotoluene	ND	93	91	2.2	95	101	6.1	70 - 130	30	
2-Hexanone	ND	67	69	2.9	53	55	3.7	70 - 130	30	l,m
2-Isopropyltoluene	ND	93	97	4.2	98	103	5.0	70 - 130	30	
4-Chlorotoluene	ND	89	86	3.4	95	100	5.1	70 - 130	30	
4-Methyl-2-pentanone	ND	96	90	6.5	91	95	4.3	70 - 130	30	
Acetone	ND	75	80	6.5	<40	<40	NC	70 - 130	30	m
Acrylonitrile	ND	102	117	13.7	98	138	33.9	70 - 130	30	m,r

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benzene	ND	99	98	1.0	98	106	7.8	70 - 130	30	
Bromobenzene	ND	97	95	2.1	94	102	8.2	70 - 130	30	
Bromochloromethane	ND	98	93	5.2	96	112	15.4	70 - 130	30	
Bromodichloromethane	ND	105	99	5.9	98	105	6.9	70 - 130	30	
Bromoform	ND	114	104	9.2	95	104	9.0	70 - 130	30	
Bromomethane	ND	93	90	3.3	44	57	25.7	70 - 130	30	m
Carbon Disulfide	ND	102	97	5.0	92	101	9.3	70 - 130	30	
Carbon tetrachloride	ND	106	98	7.8	95	113	17.3	70 - 130	30	
Chlorobenzene	ND	95	92	3.2	98	101	3.0	70 - 130	30	
Chloroethane	ND	103	92	11.3	<40	<40	NC	70 - 130	30	m
Chloroform	ND	98	97	1.0	97	115	17.0	70 - 130	30	
Chloromethane	ND	95	85	11.1	84	92	9.1	70 - 130	30	
cis-1,2-Dichloroethene	ND	95	96	1.0	95	118	21.6	70 - 130	30	
cis-1,3-Dichloropropene	ND	98	94	4.2	93	99	6.3	70 - 130	30	
Dibromochloromethane	ND	107	100	6.8	94	99	5.2	70 - 130	30	
Dibromoethane	ND	104	96	8.0	99	104	4.9	70 - 130	30	
Dibromomethane	ND	103	97	6.0	99	104	4.9	70 - 130	30	
Dichlorodifluoromethane	ND	98	84	15.4	76	90	16.9	70 - 130	30	
Ethylbenzene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
Hexachlorobutadiene	ND	84	93	10.2	94	107	12.9	70 - 130	30	
Isopropylbenzene	ND	95	95	0.0	96	104	8.0	70 - 130	30	
m&p-Xylene	ND	93	94	1.1	100	102	2.0	70 - 130	30	
Methyl ethyl ketone	ND	75	76	1.3	47	55	15.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	96	114	17.1	91	124	30.7	70 - 130	30	r
Methylene chloride	ND	93	91	2.2	93	104	11.2	70 - 130	30	
Naphthalene	ND	89	109	20.2	82	114	32.7	70 - 130	30	r
n-Butylbenzene	ND	80	88	9.5	94	101	7.2	70 - 130	30	
n-Propylbenzene	ND	91	88	3.4	96	103	7.0	70 - 130	30	
o-Xylene	ND	95	96	1.0	101	102	1.0	70 - 130	30	
p-Isopropyltoluene	ND	87	94	7.7	98	103	5.0	70 - 130	30	
sec-Butylbenzene	ND	92	91	1.1	98	104	5.9	70 - 130	30	
Styrene	ND	93	95	2.1	101	103	2.0	70 - 130	30	
tert-Butylbenzene	ND	96	95	1.0	98	104	5.9	70 - 130	30	
Tetrachloroethene	ND	94	93	1.1	100	102	2.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	101	91	10.4	95	107	11.9	70 - 130	30	
Toluene	ND	99	98	1.0	99	104	4.9	70 - 130	30	
trans-1,2-Dichloroethene	ND	86	103	18.0	86	117	30.5	70 - 130	30	
trans-1,3-Dichloropropene	ND	99	95	4.1	93	102	9.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	92	96	4.3	79	90	13.0	70 - 130	30	
Trichloroethene	ND	107	103	3.8	96	102	6.1	70 - 130	30	
Trichlorofluoromethane	ND	105	101	3.9	<40	<40	NC	70 - 130	30	m
Trichlorotrifluoroethane	ND	100	100	0.0	104	113	8.3	70 - 130	30	
Vinyl chloride	ND	97	91	6.4	80	86	7.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	100	100	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	97	101	101	0.0	103	101	2.0	70 - 130	30	
% Dibromofluoromethane	96	100	99	1.0	96	108	11.8	70 - 130	30	
% Toluene-d8	105	101	101	0.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 201689, QC Sample No: BB91709 (BB91404)

Chlorinated Herbicides - Soil

2,4,5-T	ND	43			39	38	2.6	40 - 140	30

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2,4,5-TP (Silvex)	ND	42			40	40	0.0	40 - 140	30
2,4-D	ND	48			46	46	0.0	40 - 140	30
2,4-DB	ND	36			34	34	0.0	40 - 140	30
Dalapon	ND	43			44	45	2.2	40 - 140	30
Dicamba	ND	46			47	46	2.2	40 - 140	30
Dichloroprop	ND	43			39	41	5.0	40 - 140	30
Dinoseb	ND	42			43	44	2.3	40 - 140	30
% DCAA (Surrogate Rec)	70	41			40	41	2.5	30 - 150	30

QA/QC Batch 201677, QC Sample No: BB91709 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Pesticides - Soil

4,4' -DDD	ND	88	86	2.3	89	79	11.9	40 - 140	30
4,4' -DDE	ND	74	79	6.5	83	71	15.6	40 - 140	30
4,4' -DDT	ND	76	77	1.3	79	75	5.2	40 - 140	30
a-BHC	ND	85	85	0.0	90	88	2.2	40 - 140	30
a-Chlordane	ND	86	85	1.2	89	84	5.8	40 - 140	30
Alachlor	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
Aldrin	ND	86	85	1.2	91	88	3.4	40 - 140	30
b-BHC	ND	83	83	0.0	83	81	2.4	40 - 140	30
Chlordane	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
d-BHC	ND	85	84	1.2	83	82	1.2	40 - 140	30
Dieldrin	ND	88	88	0.0	93	87	6.7	40 - 140	30
Endosulfan I	ND	90	93	3.3	102	92	10.3	40 - 140	30
Endosulfan II	ND	66	66	0.0	88	82	7.1	40 - 140	30
Endosulfan sulfate	ND	81	73	10.4	91	88	3.4	40 - 140	30
Endrin	ND	94	93	1.1	96	92	4.3	40 - 140	30
Endrin aldehyde	ND	63	65	3.1	90	86	4.5	40 - 140	30
Endrin ketone	ND	89	89	0.0	95	90	5.4	40 - 140	30
g-BHC	ND	85	84	1.2	89	86	3.4	40 - 140	30
g-Chlordane	ND	83	81	2.4	84	80	4.9	40 - 140	30
Heptachlor	ND	87	87	0.0	90	89	1.1	40 - 140	30
Heptachlor epoxide	ND	85	84	1.2	90	83	8.1	40 - 140	30
Methoxychlor	ND	80	78	2.5	81	75	7.7	40 - 140	30
Toxaphene	ND	N/A	N/A	NC	N/A	N/A	NC	40 - 140	30
% DCBP	85	96	77	22.0	95	70	30.3	30 - 150	30
% TCMX	87	92	92	0.0	94	91	3.2	30 - 150	30

QA/QC Batch 201675, QC Sample No: BB91709 (BB91412, BB91413)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	88			70	87	21.7	40 - 140	30
PCB-1221	ND							40 - 140	30
PCB-1232	ND							40 - 140	30
PCB-1242	ND							40 - 140	30
PCB-1248	ND							40 - 140	30
PCB-1254	ND							40 - 140	30
PCB-1260	ND	89			74	94	23.8	40 - 140	30
PCB-1262	ND							40 - 140	30
PCB-1268	ND							40 - 140	30
% DCBP (Surrogate Rec)	63	77			61	79	25.7	30 - 150	30
% TCMX (Surrogate Rec)	49	72			63	79	22.5	30 - 150	30

QA/QC Data

SDG I.D.: GBB91404

QA/QC Batch 201949, QC Sample No: BB92323 (BB91407)

Volatiles - Soil

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	103	97	6.0	100	97	3.0	70 - 130	30	
1,1,1-Trichloroethane	ND	94	100	6.2	119	94	23.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	106	107	0.9	105	105	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	101	97	4.0	98	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	92	115	22.2	123	122	0.8	70 - 130	30	
1,1-Dichloroethene	ND	113	107	5.5	117	120	2.5	70 - 130	30	
1,1-Dichloropropene	ND	91	83	9.2	129	92	33.5	70 - 130	30	r
1,2,3-Trichlorobenzene	ND	110	112	1.8	104	102	1.9	70 - 130	30	
1,2,3-Trichloropropane	ND	123	125	1.6	121	115	5.1	70 - 130	30	
1,2,4-Trichlorobenzene	ND	108	105	2.8	103	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	119	111	7.0	117	115	1.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	105	110	4.7	89	91	2.2	70 - 130	30	
1,2-Dichlorobenzene	ND	106	98	7.8	102	106	3.8	70 - 130	30	
1,2-Dichloroethane	ND	95	91	4.3	95	94	1.1	70 - 130	30	
1,2-Dichloropropane	ND	100	95	5.1	100	99	1.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	121	113	6.8	115	116	0.9	70 - 130	30	
1,3-Dichlorobenzene	ND	109	98	10.6	108	110	1.8	70 - 130	30	
1,3-Dichloropropane	ND	105	101	3.9	104	103	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	108	100	7.7	113	112	0.9	70 - 130	30	
2,2-Dichloropropane	ND	94	112	17.5	115	91	23.3	70 - 130	30	
2-Chlorotoluene	ND	110	99	10.5	103	107	3.8	70 - 130	30	
2-Hexanone	ND	67	78	15.2	49	48	2.1	70 - 130	30	l,m
2-Isopropyltoluene	ND	121	109	10.4	117	118	0.9	70 - 130	30	
4-Chlorotoluene	ND	114	103	10.1	119	117	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	82	87	5.9	84	78	7.4	70 - 130	30	
Acetone	ND	91	97	6.4	44	<40	NC	70 - 130	30	m
Acrylonitrile	ND	83	119	35.6	119	110	7.9	70 - 130	30	r
Benzene	ND	105	97	7.9	104	102	1.9	70 - 130	30	
Bromobenzene	ND	113	103	9.3	101	105	3.9	70 - 130	30	
Bromochloromethane	ND	82	115	33.5	121	84	36.1	70 - 130	30	r
Bromodichloromethane	ND	100	90	10.5	95	93	2.1	70 - 130	30	
Bromoform	ND	>150	>150	NC	>150	>150	NC	70 - 130	30	l,m
Bromomethane	ND	130	112	14.9	79	96	19.4	70 - 130	30	
Carbon Disulfide	ND	109	104	4.7	103	105	1.9	70 - 130	30	
Carbon tetrachloride	ND	95	110	14.6	111	90	20.9	70 - 130	30	
Chlorobenzene	ND	108	100	7.7	108	111	2.7	70 - 130	30	
Chloroethane	ND	121	109	10.4	<40	<40	NC	70 - 130	30	m
Chloroform	ND	90	111	20.9	118	91	25.8	70 - 130	30	
Chloromethane	ND	97	98	1.0	109	105	3.7	70 - 130	30	
cis-1,2-Dichloroethene	ND	87	122	33.5	125	87	35.8	70 - 130	30	r
cis-1,3-Dichloropropene	ND	96	91	5.3	96	95	1.0	70 - 130	30	
Dibromochloromethane	ND	103	99	4.0	98	94	4.2	70 - 130	30	
Dibromoethane	ND	96	94	2.1	96	93	3.2	70 - 130	30	
Dibromomethane	ND	100	93	7.3	97	95	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	110	82	29.2	117	128	9.0	70 - 130	30	
Ethylbenzene	ND	112	101	10.3	109	113	3.6	70 - 130	30	
Hexachlorobutadiene	ND	112	101	10.3	105	110	4.7	70 - 130	30	
Isopropylbenzene	ND	126	115	9.1	120	128	6.5	70 - 130	30	
m&p-Xylene	ND	117	105	10.8	120	122	1.7	70 - 130	30	
Methyl ethyl ketone	ND	65	74	12.9	57	<40	NC	70 - 130	30	l,m

QA/QC Data

SDG I.D.: GBB91404

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Methyl t-butyl ether (MTBE)	ND	109	105	3.7	109	102	6.6	70 - 130	30	
Methylene chloride	ND	105	99	5.9	111	111	0.0	70 - 130	30	
Naphthalene	ND	105	125	17.4	110	102	7.5	70 - 130	30	
n-Butylbenzene	ND	119	108	9.7	114	118	3.4	70 - 130	30	
n-Propylbenzene	ND	113	103	9.3	108	117	8.0	70 - 130	30	
o-Xylene	ND	108	101	6.7	110	109	0.9	70 - 130	30	
p-Isopropyltoluene	ND	120	108	10.5	112	116	3.5	70 - 130	30	
sec-Butylbenzene	ND	120	108	10.5	117	123	5.0	70 - 130	30	
Styrene	ND	146	130	11.6	144	>150	NC	70 - 130	30	l,m
tert-Butylbenzene	ND	113	103	9.3	105	112	6.5	70 - 130	30	
Tetrachloroethene	ND	105	99	5.9	112	125	11.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	85	111	26.5	109	84	25.9	70 - 130	30	
Toluene	ND	103	96	7.0	103	104	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	112	107	4.6	116	115	0.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	97	93	4.2	96	93	3.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	112	112	0.0	97	95	2.1	70 - 130	30	
Trichloroethene	ND	101	94	7.2	97	97	0.0	70 - 130	30	
Trichlorofluoromethane	ND	123	117	5.0	82	91	10.4	70 - 130	30	
Trichlorotrifluoroethane	ND	116	111	4.4	116	120	3.4	70 - 130	30	
Vinyl chloride	ND	115	106	8.1	101	106	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	98	100	2.0	94	96	2.1	70 - 130	30	
% Bromofluorobenzene	91	92	91	1.1	90	93	3.3	70 - 130	30	
% Dibromofluoromethane	123	83	127	41.9	123	81	41.2	70 - 130	30	r
% Toluene-d8	98	101	98	3.0	99	100	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 11, 2012

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91404	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91404	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	250	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3300	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5100	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3200	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91405	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1700	260	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2500	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1600	280	1000	1000	ug/Kg
BB91406	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	51.0	0.77	10	10	mg/Kg
BB91406	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	4950	39	400	400	mg/Kg
BB91407	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	380	140	140	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1300	270	1000	1000	ug/Kg
BB91407	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	19.2	0.76	10	10	mg/Kg
BB91407	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	3130	38	400	400	mg/Kg
BB91407	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.50	0.010	0.15	0.15	mg/L
BB91408	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	370	140	140	ug/Kg
BB91408	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1880	36	400	400	mg/Kg
BB91408	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.444	0.010	0.15	0.15	mg/L
BB91409	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	400	140	140	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6100	280	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91409	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	8100	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3400	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5300	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	3700	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1500	280	1000	1000	ug/Kg
BB91409	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	114	0.86	10	10	mg/Kg
BB91409	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	5730	43	400	400	mg/Kg
BB91410	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	350	140	140	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1200	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1500	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	2400	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1100	250	1000	1000	ug/Kg
BB91410	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	19.1	0.72	10	10	mg/Kg
BB91411	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	140	140	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6000	1200	1200	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	400	400	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3300	2800	2800	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3300	1650	1650	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1400	1400	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2100	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	3100	1000	1000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	13000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	15000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	1400	330	330	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	19000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	11000	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	5100	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	1800	1400	1000	1000	ug/Kg
BB91411	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	910	25	500	500	mg/Kg
BB91411	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	33.9	0.77	10	10	mg/Kg
BB91411	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	20700	390	400	400	mg/Kg
BB91411	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	1.15	0.010	0.15	0.15	mg/L
BB91412	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	140	140	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	2400	2400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	11000	1200	1200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	400	400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	4-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	4200	4200	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	2800	2800	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6300	1650	1650	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	6300	4100	4100	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	3900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	5900	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	110000	2700	56000	56000	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91412	MAGU-DAS	$8270-SMR	Pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	110000	2700	40000	40000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	50000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	51000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2700	330	330	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2700	1400	1400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	77000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	20000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	20000	2700	8400	8400	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	38000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	14000	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	6200	2700	1000	1000	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	23	13	13	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Heptachlor epoxide	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	37	20	20	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Dieldrin	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	12	7	7	ug/Kg
BB91412	MAGU-DAS	$PEST_SMR	Chlordane	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	120	66	66	ug/Kg
BB91412	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	11.4	0.78	10	10	mg/Kg
BB91412	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	1400	3.9	400	400	mg/Kg
BB91412	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	0.756	0.010	0.15	0.15	mg/L
BB91413	MAGU-DAS	$8270-SMR	Pyridine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	140	140	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	2400	2400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Bis(2-chloroethyl)ether	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Aniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	12000	1200	1200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodi-n-propylamine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachloroethane	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Nitrobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	1,2,4,5-Tetrachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	400	400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,4,6-Trichlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	4-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,6-Dinitrotoluene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	4200	4200	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2,4-Dinitrophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	2800	2800	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	6500	1650	1650	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	2-Nitroaniline	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	6500	4100	4100	ug/Kg

Sample Criteria Exceedences Report

Requested Criteria: GBM, RC

GBB91404

SampNo	LocCode	Acode	Phoenix Analyte	Criteria Units	ST	State Category	Criteria Name	Result	RL	Factored Criteria	Factored RL Criteria	Analysis Units
BB91413	MAGU-DAS	$8270-SMR	N-Nitrosodiphenylamine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Hexachlorobenzene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Pentachlorophenol	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	4100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Carbazole	mg/kg	CT	Pesticides, Pcb's, Tph, A	GB PMC (mg/kg)	ND	6100	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benz(a)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	20000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Chrysene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	21000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	330	330	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	3,3'-Dichlorobenzidine	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1400	1400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(b)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	27000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	9300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(k)fluoranthene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	9300	2800	8400	8400	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	16000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Benzo(a)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	16000	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Indeno(1,2,3-cd)pyrene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	7300	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	GB PMC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$8270-SMR	Dibenz(a,h)anthracene	mg/kg	CT	Semivolatile Organic Comp	RES DEC (mg/kg)	ND	2800	1000	1000	ug/Kg
BB91413	MAGU-DAS	$ETPH_SMR	Ext. Petroleum HC	mg/kg	CT	Pesticides, Pcb's, Tph, A	RES DEC (mg/kg)	1200	60	500	500	mg/Kg
BB91413	MAGU-DAS	AS-SM	Arsenic	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	28.0	0.83	10	10	mg/Kg
BB91413	MAGU-DAS	PB-SM	Lead	mg/kg	CT	Inorganic Substances	RES DEC (mg/kg)	14600	42	400	400	mg/Kg
BB91413	MAGU-DAS	SPLP-PB	SPLP Lead	mg/l	CT	Inorganic Substances	GB PMC (mg/l)**	3.22	0.10	0.15	0.15	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MAGU-DAS

Project Location: METRO NORTH RAILROAD CA **Project Number:**

Laboratory Sample ID(s): BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413, BB91414

Sampling Date(s): 5/29/2012

RCP Methods Used:

☑ 1311/1312 ☑ 6010 ☐ 7000 ☐ 7196 ☑ 7470/7471 ☑ 8081 ☐ EPH ☐ TO15

☑ 8082 ☑ 8151 ☑ 8260 ☑ 8270 ☑ ETPH ☐ 9010/9012 ☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☑ Yes ☐ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: PCB Narration, SVOA Narration, VOA Narration.	☐ Yes ☑ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☑ Yes ☐ No
5b.	Were these reporting limits met?	☐ Yes ☑ No ☐ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☑ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☑ Yes ☐ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: MaTaylor

Date: Monday, June 11, 2012

Printed Name: Maryam Taylor

Position: Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

The client requested a shorter list of elements than the 6010 RCP list.

8270 Semi-volatile Organics:
Pyridine reporting levels do not meet GBPM criteria.

Not all constituents met requested criteria due to the presence of target and non target compounds causing a necessary dilution.

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-fid1 05/31/12-1 (BB91404, BB91408, BB91410)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Instrument: Au-fid1 06/01/12-2 (BB91405, BB91413)

Initial Calibration (FID1 - ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: None

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

Instrument: Au-fid84 05/31/12-1 (BB91412)

Initial Calibration (FID84 - ETPH_13) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

Instrument: Au-xl1 06/01/12-2 (BB91406, BB91407, BB91409, BB91411)

Initial Calibration (FIDXL1 ETPH_1) - The initial calibration curve was within method criteria and had a %RSD less than 30%.

The daily continuing calibration standard was within method criteria of +/- 30% RSD.

As per section 7.2.3, a discrimination check standard was run and contained the following outliers:C36

Printed Name Jeff Bucko
Position: Chemist
Date: 6/1/2012

QC (Site Specific)

---------- Sample No: BB91410, QA/QC Batch: 201678 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 50 - 150 with the following exceptions: None.

All MSD recoveries were within 50 - 150 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB90759, QA/QC Batch: 201579 ----------

All LCS recoveries were within 50 - 150 with the following exceptions: None.

All LCSD recoveries were within 50 - 150 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd14 05/31/12-1 (BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

Initial Calibration ECD14-061712
The initial calibration RSD for the compound list was less than 20% except for the following compounds: none

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Jeff Bucko
Position: Chemist
Date: 5/31/2012

QC (Batch Specific)

---------- Sample No: BB91037, QA/QC Batch: 201601 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201689 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: 2,4-DB(36%)

Mercury Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Merlin 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Printed Name Rick Schweitzer
Position: Chemist
Date: 5/31/2012

Instrument: Merlin 06/01/12-1 (BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interfernce for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

Printed Name	Rick Schweitzer
Position:	Chemist
Date:	6/1/2012

QC (Site Specific)

---------- Sample No: BB91409, QA/QC Batch: 201811 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

All MS recoveries were within 75 - 125 with the following exceptions: None.

All MSD recoveries were within 75 - 125 with the following exceptions: None.

All MS/MSD RPDs were less than 30% with the following exceptions: None.

A matrix effect is suspected when a MS/MSD recovery is outside of criteria. No further action is required if LCS/LCSD compounds are within criteria.

QC (Batch Specific)

---------- Sample No: BB91030, QA/QC Batch: 201720 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91197, QA/QC Batch: 201722 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 20% with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.

ICP Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Icp10 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 5/31/2012

Instrument: Icp10 06/01/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/01/12-1 (BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/1/2012

Instrument: Icp9 06/04/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91411, BB91412, BB91413)

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.

Printed Name Laura Kinnin
Position: Chemist
Date: 6/4/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB90808, QA/QC Batch: 201639 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91705, QA/QC Batch: 201676 ----------

All LCS recoveries were within 75 - 125 with the following exceptions: None.

All LCSD recoveries were within 75 - 125 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201595 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411): -----

The LCS and/or the LCSD recovery is below range. A low bias is possible. (PCB-1016, PCB-1260)

Instrument: Au-ecd8 05/29/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 5/29/2012

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB90234, QA/QC Batch: 201595 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: PCB-1016(35%), PCB-1260(34%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB91709, QA/QC Batch: 201675 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd4 05/31/12-1 (BB91404, BB91405, BB91406, BB91407, BB91408, BB91410, BB91411, BB91413)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 5/31/2012

Instrument: Au-ecd4 06/04/12-1 (BB91412)

8081 Narration:

Endrin and DDT breakdown was evaluated and is below 15%.

The initial calibration RSD for the compound list was less than 20% except for the following compounds: None

The continuing calibration standards were within acceptance criteria except for the following compounds: None

Printed Name Keith Aloisa
Position: Chemist
Date: 6/4/2012

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB91709, QA/QC Batch: 201677 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201594 (Samples: BB91404, BB91405, BB91406, BB91407, BB91408, BB91409, BB91410, BB91411, BB91412, BB91413): -----

The LCS/LCSD recovery for one or more analytes is below method criteria. A low bias for these analytes is likely. (2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol)

The LCS and/or LCSD recovery for one or more analytes is below range. A low bias for these analytes is possible. (Pentachlorophenol)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (2-Nitroaniline, 3,3''-Dichlorobenzidine, 4-Chloroaniline, Aniline, Pentachloronitrobenzene)

Instrument: Chem09 05/31/12-1 (BB91404, BB91405, BB91406, BB91409, BB91410)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Benzaldehyde, Bis(2-chloroisopropyl)ether, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Bis(2-ethylhexyl)phthalate, 3,3'-dichlorobenzidine

Printed Name Damien Drobinski
Position: Chemist
Date: 5/31/2012

Instrument: Chem09 06/01/12-2 (BB91411, BB91412, BB91413)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration:

Printed Name Keith Aloisa
Position: Chemist
Date: 6/1/2012

Instrument: Chem09 06/03/12-1 (BB91407, BB91412)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: N-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Atrazine

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

Instrument: Chem09 06/05/12-1 (BB91408)

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem09/sv_0511):
Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: Hexachlorocyclopentadiene, Pentachlorophenol

The following compounds failed to meet the minimum required response factor: Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compunds had >20% difference from the initial calibration: Aniline, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Carbazole, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate

Printed Name Damien Drobinski
Position: Chemist
Date: 6/5/2012

Instrument: Chem12 06/03/12-1 (BB91409)

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

The DDT breakdown and pentachlorophenol & benzidine peak tailing were not evaluated in the DFTPP tune.

Initial Calibration (Chem12/SV_0603):

Greater than 90% of the target compounds met calibration criteria with a RSD <20% or >0.99 correlation coefficient. The following compounds had RSDs >20% and <0.99 correlation coefficient: 3&4-methylphenol (m&p-cresol), 2-nitrophenol, 2-nitroaniline, 4,6-dinitro-2-methylphenol, Benzyl Butyl Phthalate

The following compounds failed to meet the minimum required response factor: 2-nitrophenol, Hexachlorobenzene

Continuing Calibration:
Greater than 80% of target compounds met continuing calibration criteria with a %D <20. The following compounds had >20% difference from the initial calibration: Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Atrazine, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

Printed Name Keith Aloisa
Position: Chemist
Date: 6/3/2012

QC (Batch Specific)

---------- Sample No: BB91093, QA/QC Batch: 201594 ----------

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.5%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(27%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<5%), 2-Nitroaniline(>150%), 3,3'-Dichlorobenzidine(>150%), 4,6-Dinitro-2-methylphenol(8.2%), 4-Chloroaniline(>150%), Aniline(>150%), Pentachloronitrobenzene(>150%), Pentachlorophenol(26%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 201943 (Samples: BB91404, BB91405, BB91406): -----

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2-Hexanone)

QC Batch 201947 (Samples: BB91412): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Methyl ethyl ketone, 2-Hexanone)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (1,1-Dichloropropene, Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene, Methyl ethyl ketone, Tetrahydrofuran (THF))

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201949 (Samples: BB91407): -----

The LCS/LCSD RPD for one or more surrogates is outside of criteria. Both recoveries are within limits. No significant analytical impact is suspected. (% Dibromofluoromethane)

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (2-Hexanone, Methyl ethyl ketone)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene)

The QC recovery for one or more analytes is above the upper range but were not reported in the sample(s), therefore no significant bias is suspected. (Bromoform, Styrene)

QC Batch 201972 (Samples: BB91414): -----

Several QC recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is likely. (Styrene)

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

significant bias is suspected. (2-Hexanone)

The LCS and/or the LCSD recovery is below the lower range, but within the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Dichlorodifluoromethane, Ethylbenzene)

The LCS/LCSD recoveries are below the lower range, but within the method criteria. A slight low bias for these analytes is possible. (Bromomethane)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (Bromomethane)

The QC recoveries for one or more analytes is below the lower range, but within the method criteria. A slight low bias is likely. (2,2-Dichloropropane)

Instrument: Chem03 05/31/12-2 (BB91404, BB91405, BB91406)

Initial Calibration Verification (RCPS_0531):
>90% of target compounds met method criteria.
The following compounds had %RSDs >20%: Bromomethane, Acetone, Methyl Ethyl Ketone, 2-hexanone

Continuing Calibration Verification:
>80% of target compounds met method criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >20%: 2-Hexanone

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem08 05/30/12-3 (BB91414)

S -Side
Initial Calibration(RCPS_0529:
All SPCCs, CCCs and >80% of target compounds met criteria except that the following compounds had %RSDs >20%: Methylene Chloride, Trans-1,4-dichloro-2-butene

Continuing Calibration Verification:
All SPCCs, CCCs and >80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%:: trans-1,4-Dichloro-2-butene Bromomethane, 2,2-Dichloropropane, Tetrahydrofuran (THF), Styrene

Printed Name Tina Covensky
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/30/12-3 (BB91408, BB91409, BB91410, BB91411, BB91413)

Initial Calibration Verification (CHEM11/RCPS_0525A):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/30/2012

Instrument: Chem11 05/31/12-2 (BB91412)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Bromomethane, Chloroethane, Methyl Ethyl Ketone, 2-Hexanone, Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 5/31/2012

Instrument: Chem11 06/01/12-1 (BB91407)

Initial Calibration Verification (CHEM11/RCPS_0525B):
>90% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform, Isopropylbenzene, 1,2,3-trichloropropane, Naphthalene

Continuing Calibration Verification:
>80% of target compounds met criteria. Internal standards were within the 50%-200% deviation from the initial calibration.
The following compounds had % Deviations >30%: Styrene, Bromoform

Printed Name Johanna Harrington
Position: Chemist
Date: 6/1/2012

QC Comments: QC Batch 01972 06/04/12 (BB91414)

A blank MS/MSD was analyzed with this batch.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

RCP Certification Report

June 11, 2012

SDG I.D.: GBB91404

QC (Batch Specific)

---------- Sample No: BB91147, QA/QC Batch: 201947 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(60%), Bromoform(148%), Bromomethane(137%), Methyl ethyl ketone(69%), Styrene(140%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(68%), Bromoform(>150%), Styrene(135%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.5%), 1,1-Dichloropropene(31.3%), Acrylonitrile(32.7%), Bromochloromethane(33.0%), cis-1,2-Dichloroethene(31.8%), Methyl ethyl ketone(30.7%)

---------- Sample No: BB91269, QA/QC Batch: 201972 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(65%), 2-Hexanone(133%), Bromomethane(41%), Dichlorodifluoromethane(67%), Ethylbenzene(69%), Styrene(69%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2,2-Dichloropropane(68%), Bromomethane(62%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: Bromomethane(40.8%)

---------- Sample No: BB91644, QA/QC Batch: 201943 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%)

All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(69%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BB92323, QA/QC Batch: 201949 ----------

All LCS recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(67%), Bromoform(>150%), Methyl ethyl ketone(65%), Styrene(146%)

All LCSD recoveries were within 70 - 130 with the following exceptions: Bromoform(>150%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: % Dibromofluoromethane(41.9%), Acrylonitrile(35.6%), Bromochloromethane(33.5%), cis-1,2-Dichloroethene(33.5%)

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 40-160%.

6° w/c + IP

CHAIN OF CUSTODY RECORD

Temp

Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
☐ Fax #:
☒ Email: jwitherell@maguiregroup.com

Customer: Maguire Group Inc.
Address: 2080 Silas Deane Hwy
Rocky Hill CT 06067

Project: Metro North Railroad Catenary Project
Report to: Jane Witherell
Invoice to: PAS Contract - CTDOT c/o MGI

Project P.O:
Phone #: 860 224 9141
Fax #: 860 224 9147

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5-29-12

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
SE=Sediment SL=Sludge S=Soil/Solid W=Wipe O=Other

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	CT ETPH	Pests + PCBs 8081/8082	Herbicides 8151	Total RCRA 8 Metals	SGLP RCRA 8 Metals	Soil VOA Vials (1 methanol 2 H2O)	GL Soil container (6) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91404	GP-9 2'-4'	S	5-29-12	10:00am	X	X	X	X	X	X	X	2	2								
91405	GP-10 1'-3'			10:15am								3									
91406	GP-11 1'-3'			10:51am																	
91407	GP-12 1'-3'			11:14am																	
91408	GP-13 1'-3'			11:54am																	
91409	GP-14 1'-3'			12:11pm																	
91410	GP-15 1'-3'			12:43pm																	
91411	GP-20 1'-3'			12:55																	
91412	GP-21 1'-3'			1:20pm																	
91413	GP-22 1'-3'			1:49pm																	
91414	TB-15	GW		—											2						

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/30/12	11:30
[signature]	Caleb Githinji		
Caleb Githinji	Aparadise	5/30/12	1520

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected: CT

APPENDIX C
DQA & DUE Worksheets

DATA USABILITY EVALUATION WORKSHEET

Project Name: Task 210 - Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport, & Stratford, CT

Laboratory: Phoenix Environmental Laboratories, Inc.

Laboratory Report: GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389, GBB87121, GBB91404, GBB91848

Date Samples Collected: April 2, 4, 9, 10, 13, 16-18 & 30, May 1-4, 14-16, 29 & 30, 2012

Describe the intended use of the data: To verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction

Nonconformance DQA Review Elements	Briefly Summarize DQA Nonconformance
Standard RCP Deliverables	
Data Package Inspection	
Reasonable Confidence Evaluation	
Chain of Custody Evaluation	
Sample Result Evaluation	
Sample Preservation & Holding Time Evaluation	
Blank Evaluation	Laboratory Blanks all acceptable. Field blank samples FB-3 collected from soil sampling equipment on May 30, 2012 contained trace amounts of total metals. The concentrations are negligable and do not have any bearings on the results.
Laboratory Control Samples	LCS/LCSD and MS/MSD recoveries, and LCS/LCSD RPDs for SVOCs, VOCs, PCBs, Pesticides, Lead, Arsenic, and Petroleum Hydrocarbons in numerous soil and groundwater samples are outside of acceptable ranges. However, in each instance, the nonconformances are negligable and do not impact the overall data quality.
Surrogates	PCB and ETPH surrogates spike recoveries were outside acceptable ranges in several groundwater sample and field blank samples. In each instance, additional factors made the data quality acceptable.
Site-Specific Matrix Spikes and Matrix Spike Duplicates	
Tentatively Identified Compounds	
Other QC Data	

DATA USABILITY EVALUATION WORKSHEET

Provide a summary statement describing how the analytical data set relied upon is of adequate quality and of sufficient accuracy, precision, and sensitivity for the intended purpose.

The results will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction

A data quality assessment and data usability evaluation was performed for the data generated in accordance with the CTDEP's "Laboratory Quality Assurance and Quality Control, Data Quality Assessment and Data Usability Evaluation Guidance Document".

Non-conformances related to Surrogate spike recoveries, LCS/LCSD/MS/MSD recoveries, LCS/LCSD RPDs, and Surrogate recoveries do not have significant bearings on the accuracy and usability of the data for its intended purposes. In all cases the non-conformances have no impact to the data usability and is considered of sufficient quality and precision using multiple lines of evidence.

The data indicates that contaminants are present in the soil and groundwater at low to elevated concentrations that exceed applicable RSR criteria and CTDEEP general permit effluent limits. Task 310 Plans and Specifications will be prepared to address the soil and groundwater contamination during the construction phase.

Based on the above findings from the DQA and DUE, the analytical data is of adequate and of sufficient accuracy, precision and sensitivity to identify areas requiring special treatment and/or handling during the construction phase of the project.

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-65 3'-5'	4/16/2012	2,4-Dimethylphenol, Pyridine	LCS/LCSD	low	Poor performing compounds. Low detection limits and not contaminants of concern	Multiple lines of evidence support data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 2'-4'						
GP-73 2'-4'	4/17/2012					
GP-74 2'-4'						
GP-75 2'-4'						
GP-76 3'-5'						
GP-77 2'-4'						
GP-78 2'-4'						
GP-79 2'-4'						
GP-80 2'-4'						
GP-81 2'-4'						
GP-56 3'-5'	4/18/2012					
GP-57 3'-5'						
GP-58 3'-5'						
GP-59 3'-5'						
GP-60 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
GP-65 3'-5'	4/16/2012	2-Nitroaniline, 3-Nitroaniline	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 2'-4'						
GP-73 2'-4'	4/17/2012					
GP-74 2'-4'						
GP-75 2'-4'						
GP-76 3'-5'						
GP-77 2'-4'						
GP-78 2'-4'						
GP-79 2'-4'						
GP-80 2'-4'						
GP-81 2'-4'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-65 3'-5'	4/16/2012	Benzidine, Pyridine, 4,6-Dinitro-2-methylphenol	LCS/LCSD RPD	non-directional	Recoveries within acceptable ranges	No impact to data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 2'-4'						
GP-73 2'-4'	4/17/2012					
GP-74 2'-4'						
GP-75 2'-4'						
GP-76 3'-5'						
GP-77 2'-4'						
GP-78 2'-4'						
GP-79 2'-4'						
GP-80 2'-4'						
GP-81 2'-4'						
GP-6 1'-3'	5/15/2012					
GP-82 1'-3'						
GP-83 2'-4'						
GP-84 2'-4'						
GP-85 1'-3'						
GP-86 2'-4'						
GP-87 2'-4'						
GP-16 1'-3'	5/30/2012					
GP-17 1'-3'						
GP-18 1'-3'						
GP-19 1'-3'						
GP-23 2'-4'						
GP-24 1'-3'						
GP-25 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 2'-4'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						
GP-32 1'-3'						
GP-33 1'-3'						
GP-34 1'-3'						
GP-35 1'-3'						
GP-36 1'-3'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-56 3'-5'	4/18/2012	2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline, 4-Nitrophenol, 3,3'-Dichlorobenzidine, Aniline, Pentachloronitrobenzene	LCS/LCSD, MS/MSD	high	Poor performing compounds and not detected in samples	No impact to data usability
GP-57 3'-5'						
GP-58 3'-5'						
GP-59 3'-5'						
GP-60 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
GP-44 10'-12'	4/30/2012					
GP-45 10'-12'						
GP-46 10'-12'						
GP-47 2'-4'						
GP-48 2'-4'						
GP-49 2'-4'						
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						
GP-37 10'-12'	5/1/2012					
GP-38 10'-12'						
GP-39 10'-12'						
GP-40 10'-12'						
GP-41 10'-12'	5/2/2012					
GP-42 10'-12'						
GP-43 10'-12'						
GP-1 1'-3'	5/14/2012					
GP-2 1'-3'						
GP-3 1'-3'						
GP-4 2'-4'						
GP-5 1'-3'						
GP-7 2'-4'						
GP-8 2'-4'						
GP-6 1'-3'	5/15/2012					
GP-82 1'-3'						
GP-83 2'-4'						
GP-84 2'-4'						
GP-85 1'-3'						
GP-86 2'-4'						
GP-87 2'-4'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-44 10'-12'	4/30/2012	2,4-Dinitrophenol, Pyridine , 4,6-Dinitro-2-methylphenol, Pentachlorophenol	LCS/LCSD, MS/MSD	low	Poor performing compounds and low detection limits	Multiple lines of evidence support data usability
GP-45 10'-12'						
GP-46 10'-12'						
GP-47 2'-4'						
GP-48 2'-4'						
GP-49 2'-4'						
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						
GP-37 10'-12'	5/1/2012					
GP-38 10'-12'						
GP-39 10'-12'						
GP-40 10'-12'						
GP-41 10'-12'	5/2/2012					
GP-42 10'-12'						
GP-43 10'-12'						
GP-1 1'-3'	5/14/2012					
GP-2 1'-3'						
GP-3 1'-3'						
GP-4 2'-4'						
GP-5 1'-3'						
GP-7 2'-4'						
GP-8 2'-4'						
GP-6 1'-3'	5/15/2012					
GP-82 1'-3'						
GP-83 2'-4'						
GP-84 2'-4'						
GP-85 1'-3'						
GP-86 2'-4'						
GP-87 2'-4'						
GP-9 2'-4'	5/29/2012					
GP-10 1'-3'						
GP-11 1'-3'						
GP-12 1'-3'						
GP-13 1'-3'						
GP-14 1'-3'						
GP-15 1'-3'						
GP-20 1'-3'						
GP-21 1'-3'						
GP-22 1'-3						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-9 2'-4'	5/29/2012	2-Nitroaniline, 4-Chloroaniline, 3,3'-Dichlorobenzidine, Aniline, Pentachloronitrobenzene	LCS/LCSD, MS/MSD	high	Poor performing compounds and not detected in samples	No impact to data usability
GP-10 1'-3'						
GP-11 1'-3'						
GP-12 1'-3'						
GP-13 1'-3'						
GP-14 1'-3'						
GP-15 1'-3'						
GP-20 1'-3'						
GP-21 1'-3'						
GP-22 1'-3						
GP-16 1'-3'	5/30/2012					
GP-17 1'-3'						
GP-18 1'-3'						
GP-19 1'-3'						
GP-23 2'-4'						
GP-24 1'-3'						
GP-25 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 2'-4'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						
GP-32 1'-3'						
GP-33 1'-3'						
GP-34 1'-3'						
GP-35 1'-3'						
GP-36 1'-3'						
GP-16 1'-3'	5/30/2012	2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol	LCS/LCSD	low	Poor performing compounds and low detection limits	Multiple lines of evidence support data usability
GP-17 1'-3'						
GP-18 1'-3'						
GP-19 1'-3'						
GP-23 2'-4'						
GP-24 1'-3'						
GP-25 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 2'-4'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						
GP-32 1'-3'						
GP-33 1'-3'						
GP-34 1'-3'						
GP-35 1'-3'						
GP-36 1'-3'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticu

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Laboratory ID	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
VOC Analysis - 8260						
GP-65 3'-5'	4/16/2012	2-Hexanone, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Trichlorofluoromethane, 1,4-Dichlorobenzene, Acetone, Methyl Ethyl Ketone, Naphthalene, Bromomethane, Chloroethane, Hexachlorobutadiene, n-Butylbenzene	LCS/LCSD, MS/MSD	low	Poor performing compounds and low detection limits. No elevated PID readings in samples suggesting presence of elevated concentrations of VOCs	Multiple lines of evidence support data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-56 3'-5'	4/18/2012					
GP-57 3'-5'						
GP-58 3'-5'						
GP-59 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
TB-7						
GP-37 10'-12'	5/1/2012					
GP-38 10'-12'						
GP-39 10'-12'						
GP-40 10'-12'						
GP-42 10'-12'	5/2/2012					
GP-42 10'-12'						
GP-65 3'-5'	4/16/2012	Dichlorodifluoromethane, Trichlorofluoromethane, 1,2,4-Trichlorobenzene, Acrylonitrile	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 3'-5'						
GP-76 3'-5'	4/17/2012					
GP-77 2'-4'						
GP-79 2'-4'						
GP-80 2'-4'						
GP-81 2'-4'						
GP-60 3'-5'	4/18/2012					
GP-41 10'-12'	5/2/2012					
GP-42 10'-12'						
GP-71 3'-5'	4/16/2012	1,1-Dichloroethane, 2,2-Dichloropropane, Carbon Tetrachloride, Chloroform, Acrylonitrile	LCS/LCSD RPDs	non-directional	Recoveries within acceptable ranges or not contaminant of concern	Multiple lines of evidence support data usability
GP-72 3'-5'						
GP-73 2'-4'	4/17/2012					
GP-74 2'-4'						
GP-75 2'-4'						
GP-76 3'-5'						
GP-77 2'-4'						
GP-79 2'-4'						
GP-80 2'-4'						
GP-81 2'-4'						
GP-55 2'-4'	4/30/2012					
GP-41 10'-12'	5/2/2012					
GP-42 10'-12'						
GP-43 10'-12'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticu

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Laboratory ID	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
VOC Analysis - 8260						
GP-44 10'-12'	4/30/2012	2-Hexanone, 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene, Acetone, Methyl Ethyl Ketone, Bromomethane, Acrylonitrile, Hexachlorobutadiene, n-Butylbenzene	LCS/LCSD, MS/MSD	low	Poor performing compounds and low detection limits. No elevated PID readings in samples suggesting presence of elevated concentrations of VOCs	Multiple lines of evidence support data usability
GP-45 10'-12'						
GP-46 10'-12'						
GP-47 2'-4'						
GP-48 2'-4'						
GP-49 2'-4'						
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-7 2'-4'	5/14/2012					
GP-8 2'-4'						
GP-6 1'-3'	5/15/2012					
GP-82 1'-3'						
GP-83 2'-4'						
GP-85 1'-3'						
GP-86 2'-4'						
GP-9 2'-4'	5/29/2012					
GP-10 1'-3'						
GP-11 1'-3'						
GP-12 1'-3'						
GP-44 10'-12'	4/30/2012	Naphthalene, Acrylonitrile, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene, Bromobenzene, p-Isopropyltoluene, Bromoform, Styrene, Bromomethane	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-45 10'-12'						
GP-46 10'-12'						
GP-50 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						
GP-12 1'-3'	5/29/2012					
GP-21 1'-3'						
TB-12 Low	5/14/2012	1,2-Dichloroethene, Dibromofluoromethane, 1,1-Dichloropropene, Acrylonitrile, Bromochloromethane, cis-1,2-Dichloroethene, MEK, Tetrahydrofuran	LCS/LCSD RPD	non-directional	Recoveries acceptable	No impact to data usability
TB-12 High						
GP-12 1'-3'	5/29/2012					
GP-21 1'-3'						
GP-16 1'-3'	5/30/2012					
GP-17 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 1'-3'						
GP-29 1'-3'						
GP-30 1'-3'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticu

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Laboratory ID	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
VOC Analysis - 8260						
GP-16 1'-3'	5/30/2012	2-Hexanone, Acetone, Methyl Ethyl Ketone, Acrylonitrile	LCS/LCSD	low	Poor performing compounds and low detection limits. No elevated PID readings in samples suggesting presence of elevated concentrations of VOCs	Multiple lines of evidence support data usability
GP-17 1'-3'						
GP-18 1'-3'						
GP-19 1'-3'						
GP-23 2'-4'						
GP-24 1'-3'						
GP-25 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 1'-3'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						
GP-32 1'-3'						
GP-33 1'-3'						
GP-34 1'-3'						
GP-35 1'-3'						
GP-36 1'-3'						
GP-16 1'-3'	5/30/2012	Bromoform, Styrene, Bromomethane	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-17 1'-3'						
GP-18 1'-3'						
GP-19 1'-3'						
GP-23 2'-4'						
GP-24 1'-3'						
GP-25 1'-3'						
GP-26 1'-3'						
GP-27 1'-3'						
GP-28 1'-3'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
PCB Analysis - 8082						
GP-9 2'-4'	5/29/2012	PCB-1016, PCB-1260	LCS/LCSD	low	Other compounds are present in samples at concentrations exceeding RSR criteria. No other PCB compounds detected in samples	Multiple lines of evidence support data usability
GP-10 1'-3'						
GP-11 1'-3'						
GP-12 1'-3'						
GP-13 1'-3'						
GP-14 1'-3'						
GP-15 1'-3'						
GP-20 1'-3'						
Pesticide Analysis - 8081						
GP-27 1'-3'	5/30/2012	4,4'-DDD	LCS/LCSD RPD	non-directional	Recoveries acceptable	Multiple lines of evidence support data usability
GP-28 2'-4'						
GP-29 1'-3'						
GP-30 1'-3'						
GP-31 1'-3'						
GP-32 1'-3'						
GP-33 1'-3'						
GP-34 1'-3'						
GP-35 1'-3'						
GP-36 1'-3'						
RCRA 8 Metals Analysis						
GP-65 3'-5'	4/16/2012	Arsenic	LCS/LCSD	high	Not detected at elevated concentrations in samples	No impact to data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 2'-4'						
GP-56 3'-5'	4/18/2012	Lead	LCS/LCSD, MS/MSD	high	Not detected at elevated concentrations in samples, or if detected at elevated concentrations, then additional contaminants are present at elevated concentrations	Multiple lines of evidence support to data usability
GP-57 3'-5'						
GP-58 3'-5'						
GP-59 3'-5'						
GP-60 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
GP-44 10'-12'	4/30/2012					
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
Herbicides Analysis - 8151						
GP-65 3'-5'	4/16/2012	Dinoseb, Dichloroprop	LCS/LCSD	low	MS/MSD recoveries acceptable	Multiple lines of evidence support data usability
GP-66 3'-5'						
GP-67 3'-5'						
GP-68 3'-5'						
GP-69 5'-7'						
GP-70 3'-5'						
GP-71 3'-5'						
GP-72 2'-4'						
GP-58 3'-5'	4/18/2012					
GP-59 3'-5'						
GP-60 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
GP-44 10'-12'	4/30/2012					
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						
GP-37 10'-12'	5/1/2012					
GP-38 10'-12'						
GP-39 10'-12'						
GP-40 10'-12'						
GP-58 3'-5'	4/18/2012	Dinoseb, Endrin aldehyde	LCS/LCSD RPDs	non-directional	Not contaminant of concern	Multiple lines of evidence support data usability
GP-59 3'-5'						
GP-60 3'-5'						
GP-61 1'-3'						
GP-62 6'-8'						
GP-63 3'-5'						
GP-64 3'-5'						
GP-44 10'-12'	4/30/2012					
GP-50 2'-4'						
GP-51 1'-3'						
GP-52 2'-4'						
GP-53 2'-4'						
GP-54 2'-4'						
GP-55 2'-4'						
GP-6 1'-3'	5/15/2012					
GP-82 1'-3'						
GP-83 2'-4'						
GP-84 2'-4'						
GP-85 1'-3'						
GP-86 2'-4'						
GP-87 2'-4'						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - SOIL SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	

BNA Analysis Notes - Method 8270

(1) Initial Calibration (ICAL) on 4/17/12, 4/18/12 & 4/20/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Carbazole, Pentachlorophenol, 3-Nitroaniline

(2) ICAL on 4/17/12, 4/18/12, & 4/20/12 for Method 8270 failed to meet the minimum response factors for 2-Nitrophenol, % 2, 4, 6-Tribromophenol, & Hexachlorobenzene

(3) Continuing Calibration verification (CCV) on 4/17/12 for Method 8270 did not meet the RCP RPDs for 4-Nitrophenol, Carbazole

(4) CCV on 4/18/2012 for Method 8270 did not meet the RCP RPDs for 4-Nitrophenol, Benzyl Alcohol, Hexachlorocyclopentadiene, 2-Nitroaniline, 3-Nitroaniline, 3,3'-Dichlorobenzidine

(5) CCV on 4/20/12 for Method 8270 did not meet the RCP RPDs for Aniline, n-Nitrosodi--n-propylamine, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol, 2- Nitroaniline

(6) ICAL on 5/1/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Chloroaniline

(7) ICAL on 5/1/12 & 5/2/12 for Method 8270 failed to meet the minimum response factors for 2-Nitrophenol, Hexachlorobenzene

(8) CCV on 5/1/12 for Method 8270 did not meet the RCP RPDs for Aniline, Hexachlorocyclopentadiene, Benzaldehyde

(9) ICAL on 5/2/12 & 5/3/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Pentachlorophenol, 3-Nitroaniline, 4-Chloroaniline, 4-Nitroaniline, Carbazole

(10) ICAL on 5/2/12, 5/3/12, 5/15/16/12, & 5/16/12 for Method 8270 failed to meet the minimum response factors for 2-Nitrophenol, Hexachlorobenzene

(11) CCV on 5/2/12 for Method 8270 did not meet the RCP RPDs for Aniline, Hexachlorocyclopentadiene, Bis(2-chloroisopropyl)ether, 2-Nitroaniline, Carbazole

(12) CCV on 5/3/12 for Method 8270 did not meet the RCP RPDs for Aniline, 3-Nitroaniline, Carbazole, 4-Chloroaniline, 2,4-Dinitrophenol, 4,6-Dinitro-2methylphenol, 3,3'-Dichlorobenzidine

(13) ICAL on 5/15/12 & 5/16/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Pentachlorophenol, 4-Nitroaniline, 4-Nitrophenol, Carbazole

(14) CCV on 5/15/12 & 5/16/12 for Method 8270 did not meet the RCP RPDs for Aniline, 3-Nitroaniline, Carbazole, 2,4-Dinitrophenol, 4,6-Dinitro-2methylphenol, 3,3'-Dichlorobenzidine, Benzaldehyde

(15) CCV on 5/17/12 & 5/18/12 for Method 8270 did not meet the RCP RPDs for 3,3'-Dichlorobenzidine, Benzaldehyde, 2-Nitrophenol, Pentachloronitrobenzene

(10) ICAL on 5/17/12 & 5/18/12 for Method 8270 failed to meet the minimum response factors for Hexachlorobenzene

(11) ICAL on 5/20/12 for Method 8270 did not meet the RCP RPDs for Aniline, 3-Nitroaniline, Hexachlorocyclopentadiene, 4-Chloroaniline, 3,3'-Dichlorobenzidine

(12) ICAL on 5/20/12 for Method 8270 failed to meet the minimum response factors for 2-Nitrophenol, Hexachlorobenzene

(13) CCV on 5/20/12 for Method 8270 did not meet the RCP RPDs for Aniline, 3-Nitroaniline, Benzaldehyde, 4-Chloroaniline, Pyridine, n-Nitrosodimethylamine, 3,3-Dichlorobenzidine

(14) ICAL on 5/31/12, 6/1/12, 6/3/12, & 6/5/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, Pentachlorophenol

(15) ICAL on 5/31/12, 6/1/12, 6/3/12, & 6/5/12 for Method 8270 failed to meet the minimum response factors for Hexachlorobenzene, 2,4-Dinitrophenol

(16) CCV on 5/31/12 for Method 8270 did not meet the RCP RPDs for 4,6-Dinitro-2-methylphenol, Benzaldehyde, Bis(2-chloroisopropyl)ether, 2,4-Dinitrophenol, Bis(2-ethylhexyl)phthalate, 3,3'-Dichlorobenzidine

(17) CCV on 6/3/12 for Method 8270 did not meet the RCP RPDs for Atrazine, n-Nitrosodimethylamine, Pyridine, 2-Nitrophenol, Benzaldehyde, Benzoic Acid, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Benzyl Butyl Phthalate, Bis(2-ethylhexyl)phthalate, Di-n-octylphthalate

(18) CCV on 6/5/12 for Method 8270 did not meet the RCP RPDs for 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol, Bis(2-ethylhexyl)phthalate, Aniline, Carbazole, Benzyl Butyl Phthalate

VOC Analysis Notes - Method 8260

(1) ICAL on 4/18/12, 4/19/12, & 4/20/12 for Method 8260 did not meet the RCP RPDs for Acrolein, Acetone, Bromomethane

(2) CCV on 4/18/12, 4/19/12, & 4/20/12 for Method 8260 did not meet the RCP RPDs for Acrolein, Tetrahydrofuran, Dichlorodifluoromethane

(3) ICAL on 5/1/12 for Method 8260 did not meet the RCP RPDs for Bromomethane, Acetone, MEK, Acrylonitrile, Tetrahydrofuran

(4) CCV on 5/1/12, 5/2/12, & 5/3/12 for Method 8260 did not meet the RCP RPDs for Tetrahydrofuran

(5) ICAL on 5/2/12 for Method 8260 did not meet the RCP RPDs for Acetone, MEK, Acrolein

(6) ICAL on 5/3/12 & 5/4/12 for Method 8260 did not meet the RCP RPDs for Methylene Chloride, Acrylonitrile, Tetrahydrofuran, Carbon Tetrachloride

(7) ICAL on 5/7/12 for Method 8260 did not meet the RCP RPDs for Acrylonitrile, Methylene Chloride, 1,2,4-Trichlorobenzne, 1,2,3-Trichlorobenzene, Xylenes, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-tetrachloroethane, Bromobenzene, n-Propylbenzene, 2-Chlorotoluene, 1,3,5-Trimethylbenzene, trans-1,4-Dichloro-2-butene, 1,2-Dibromo-3-chloropropane, Hexachlorobutadiene, Naphthalene

(8) CCV on 5/7/12 for Method 8260 did not meet the RCP RPDs for Tetrahydrofuran, Xylenes, 1,1,2,2-Tetrachloroethane, Bromobenzene, 1,2,3-Trichloropropane, n-Propylbenzene, 2-Chlorotoluene

(9) ICAL on 5/15/12, 5/16/12, & 5/17/12 for Method 8260 did not meet the RCP RPDs for Bromomethane, Chloroethane

(10) CCV on 5/15/12 for Method 8260 did not meet the RCP RPDs for Tetrahydrofuran

(11) ICAL on 5/30/12, 5/31/12, & 6/1/12 for Method 8260 did not meet the RCP RPDs for Bromoform, Isopropylbenzene, 1,2,3-Trichloropropane, Naphthalene, MEK, 2-Hexanone

(12) CCV on 5/30/12 for Method 8260 did not meet the RCP RPDs for Styrene, Bromoform

(13) CCV on 5/31/12 & 6/1/12 for Method 8260 did not meet the RCP RPDs for Bromomethane, Chloroethane, MEK, 2-Hexanone, Styrene, Bromoform, Tetrahydrofuran

(14) ICAL on 6/4/12 & 6/5/12 for Method 8260 did not meet the RCP RPDs for Acrylonitrile, MEK, 1,2,4-Trichloropropane, Bromoform, Isopropylbenzene, 1,1,2,2-tetrachloroethane, n-Butylbenzene, Styrene, 1,2,4-Trimethylbenzene, trans-1,4-Dichloro-2-butene, cis-1,2-Dichloropropane, Naphthalene, 1,1-Dichlorothane, 2,2-Dichloropropane, Tetrahydrofuran, Bromochloromethane, 1,1-Dichloropropene, sec-Butylbenzene, 2-Isopropyltoluene

(15) CCV on 6/4/12 & 6/5/12 for Method 8260 did not meet the RCP RPDs for Styrene, Bromoform, Bromomethane

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-69 GW	4/2/2012	2,4-Dinitrophenol, 4-Chloroaniline, Hexachlorocyclopentadiene, Pyridine, Pentachlorophenol, n-Nitrosodimethylamine	LCS/LCSD	low	Poor performing compounds. Low detection limits and not contaminants of concern	Multiple lines of evidence support data usability
GP-71 GW						
GP-73 GW						
GP-77 GW						
GP-79 GW						
GP-81 GW						
GP-9 GW	4/4/2012					
GP-13 GW						
GP-15 GW						
GP-16 GW						
GP-18 GW						
GP-19 GW						
GP-11 GW	4/9/2012					
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-37 GW	5/1/2012					
GP-69 GW	4/2/2012	2,4-Dinitrophenol, 2-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Nitrophenol, Benzyl butyl phthalate, Bis(2-ethylhexyl)phthalate, Pentachlorophenol, n-Nitrosodimethylamine	LCS/LCSD RPD	non-directional	Poor performing compounds. Low detection limits and not contaminants of concern. Also all recoveries excluding 2,4-Dinitrophenol, n-Nitrosodimethylamine & Pentachlorophenol within acceptable rangers	Multiple lines of evidence support data usability
GP-71 GW						
GP-73 GW						
GP-77 GW						
GP-79 GW						
GP-81 GW						
GP-9 GW	4/4/2012					
GP-13 GW						
GP-15 GW						
GP-16 GW						
GP-18 GW						
GP-19 GW						
GP-11 GW	4/9/2012					
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-9 GW	4/4/2012	2-Nitroaniline, Carbazole	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-13 GW						
GP-15 GW						
GP-16 GW						
GP-18 GW						
GP-19 GW						
GP-11 GW	4/9/2012					
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-37 GW	5/1/2012					

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-60 GW	4/10/2012	Pyridine, 2,4-Dinitrophenol, Pentachlorophenol, Hexachlorocyclopentadiene	LCS/LCSD	low	Poor performing compounds. Low detection limits and not contaminants of concern	Multiple lines of evidence support data usability
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
GP-32 GW	4/13/2012					
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
FB-1						
GP-39 GW	5/1/2012					
GP-41 GW						
GP-41 GW	5/2/2012					
GP-43 GW						
GP-46 GW						
GP-49 GW						
GP-50 GW						
GP-7 GW	5/3/2012					
GP-24 GW						
GP-26 GW						
GP-36 GW						
GP-60 GW	4/10/2012	2-Nitroaniline, 3-Nitroaniline, Carbazole	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
GP-32 GW	4/13/2012					
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
FB-1						
GP-39 GW	5/1/2012					
GP-44 GW						
GP-41 GW	5/2/2012					
GP-43 GW						
GP-46 GW						
GP-49 GW						
GP-50 GW						
GP-7 GW	5/3/2012					
GP-24 GW						
GP-26 GW						
GP-36 GW						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
BNA Analysis - 8270						
GP-28 GW	5/4/2012	Pyridine	LCS/LCSD	low	Poor performing compounds. Low detection limits and not contaminants of concern	Multiple lines of evidence support data usability
GP-30 GW						
GP-56 GW						
GP-58 GW						
FB-2						
GP-1 GW	5/16/2012					
GP-4 GW						
GP-5 GW						
GP-83 GW						
GP-1 GW	5/16/2012	2,4-Dinitrophenol, Pentachlorophenol, Pyridine	LCS/LCSD RPD	non-directional	Recoveries acceptable	No impact to data usability
GP-4 GW						
GP-5 GW						
GP-83 GW						
FB-3	5/30/2012					
GP-28 GW	5/4/2012	3-Nitroaniline, 2-Nitroaniline, 4-Chloroaniline, Carbazole, Pentachloronitrobenzene	LCS/LCSD	high	Not detected in samples	No impact to data usability
GP-30 GW						
GP-56 GW						
GP-58 GW						
FB-2						
GP-1 GW	5/16/2012					
GP-4 GW						
GP-5 GW						
GP-83 GW						
FB-3	5/30/2012					

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
VOC Analysis - 8260						
GP-69 GW	4/2/2012	Carbon Disulfide, Methyl Ethyl Ketone, Bromoform, 1,1,1,2-Tetrachloroethane	LCS/LCSD & MS/MSD	high	Not detected in samples	No impact to data usability
GP-71 GW						
GP-77 GW						
GP-79 GW						
GP-81 GW						
GP-9 GW	4/4/2012					
GP-13 GW						
GP-15 GW						
GP-16 GW						
GP-18 GW						
GP-19 GW						
TB-1						
GP-11 GW	4/9/2012					
GP-20 GW						
GP-21 GW						
GP-22 GW						
TB-2						
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
TB-3	4/10/2012	2-Isopropyltoluene, Carbon Disulfide, n-Butylbenzene	LCS/LCSD	high	Not detected in sample	No impact to data usability
GP-69 GW	4/2/2012	Dichlorodifluoromethane, 2,2-Dichloropropane	LCS/LCSD	low	Poor performing compounds and not contaminants of concern	Multiple lines of evidence support data usability
GP-71 GW						
GP-21 GW	4/9/2012					
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
FB-1	4/13/2012					
GP-54 GW						
GP-55 GW						
TB-4						
GP-9 GW	4/4/2012	Dichlorodifluoromethane, 2,2-Dichloropropane	LCS/LCSD RPD	non-directional	Poor performing compounds, and Dichlorodifluoromethane LCS, LCSD recoveries acceptable. SVOCs and lead present in samples at concentrations exceeding General Permit criteria	Multiple lines of evidence support data usability
GP-13 GW						
GP-21 GW	4/9/2012					
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	PRELIMINARY DUE CONSIDERATIONS/NOTES
VOC Analysis - 8260						
FB-1	4/13/2012	Naphthalene, Styrene, Trichlorofluoromethane, MTBE, 2,2-Dichloropropane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Tetrachloroethene , 2-Hexanone	LCS/LCSD	high	Not detected in samples	No impact to data usability
TB-5	4/16/2012					
GP-37 GW	5/1/2012					
GP-39 GW						
GP-44 GW						
GP-41 GW	5/2/2012					
GP-43 GW						
GP-46 GW						
GP-49 GW						
GP-50 GW						
TB-10						
GP-28 GW	5/4/2012					
GP-30 GW						
GP-56 GW						
GP-58 GW						
FB-2						
TB-11						
GP-1 GW	5/16/2012					
GP-4 GW						
GP-5 GW						
GP-83 GW						
TB-14						
TB-15	5/29/2012					
FB-3	5/30/2012					
TB-16						
GP-32 GW	4/13/2012	Bromomethane, trans-1,4-Dichloro-2-butene, 2,2-Dichloropropane, cis-1,3-Dichloropropene, 4 Methyl-2-pentanone, Dibromomethane, Styrene, Ethylbenzene, Dichlorodifluoromethane	LCS/LCSD	low	Poor performing compounds and not contaminants of concern	Multiple lines of evidence support data usability
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
GP-37 GW	5/1/2012					
GP-39 GW						
GP-44 GW						
TB-9						
FB-2	5/4/2012					
TB-11						
TB-15	5/29/2012					
FB-3	5/30/2012					
TB-16						
TB-5	4/16/2012	Carbon tetrachloride, Bromomethane	LCS/LCSD RPD	non-directional	Poor performing compound, and trip blank samples (not critical)	Multiple lines of evidence support data usability
TB-15	5/29/2012					
FB-3	5/30/2012					
TB-16						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	DUE CONSIDERATIONS/NOTES
Herbicides Analysis - 8151						
GP-11 GW	4/9/2012	2,4,5-T, Dinoseb	LCS/LCSD RPD	non-directional	LCS and LCSD recoveries acceptable	Multiple lines of evidence support data usability
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
GP-32 GW	4/13/2012					
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
FB-1						
CT ETPH Analysis						
GP-73 GW	4/2/2012	% n-(No Suggestions) & Extractable Petroleum Hydrocarbons	LCS/LCSD RPD	non-directional	Recoveries acceptable	No impact to data usability
GP-77 GW						
GP-79 GW						
GP-81 GW						
GP-11 GW	4/9/2012					
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
GP-32 GW	4/13/2012					
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
FB-1						
GP-11 GW	4/9/2012	% n-Pentacosane	Surrogate	high	Petroleum hydrocarbons not detected in samples	No impact to data usability
GP-20 GW						
GP-21 GW						
GP-22 GW						
GP-60 GW	4/10/2012					
GP-62 GW						
GP-64 GW						
GP-65 GW						
GP-67 GW						
GP-32 GW	4/13/2012					
GP-34 GW						
GP-53 GW						
GP-54 GW						
GP-55 GW						
FB-1						

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	(see notes at end of DQA)

Sample ID	Sample Date	Compound(s)	QC OUTLIER	POTENTIAL BIAS	COMMENTS	DUE CONSIDERATIONS/NOTES
Herbicides Analysis - 8151						
GP-1 GW	5/16/2012	Dinoseb, 2,4,5-T, 2,4,5-TP, 2,4-DB	LCS/LCSD RPD	non-directional	LCS and LCSD recoveries acceptable	Multiple lines of evidence support data usability
GP-4 GW						
GP-5 GW						
GP-83 GW						
FB-3	5/30/2012					
FB-3	5/30/2012	2,4-D, Dinoseb	LCS/LCSD	low	Not critical sample (field blank)	Multiple lines of evidence support data usability
CT ETPH Analysis						
GP-1 GW	5/16/2012	Extractable Petroleum Hydrocarbons	LCS/LCSD RPD	non-directional	Recoveries acceptable	No impact to data usability
GP-4 GW						
GP-5 GW						
GP-83 GW						
Pesticide Analysis - 8081						
FB-3	5/30/2012	4,4'-DDT, Endrin Aldehyde)	LCS/LCSD	high	Not detected in sample	No impact to data usability
FB-3	5/30/2012	4,4-DDE, Chlordane, Endosulfan, Endrin	LCS/LCSD RPD	non-directional	Recoveries acceptable	No impact to data usability
PCB Analysis - 8082						
FB-3	5/30/2012	% DCBP (Surrogate)	LCS/LCSD RPD	non-directional	Recoveries acceptable including individual PCB compounds & not detected in sample	No impact to data usability

RCP DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION WORKSHEET - AQUEOUS SAMPLES

Metro North Railroad, New Haven Line, Catenary Replacement Sections C1A & C2 - East Norwalk, Westport, Bridgeport & Stratford, Connecticut

Laboratory:	Phoenix Environmental Laboratories, Inc.
SDG:	GBB61071, GBB62580, GBB69754, GBB70278, GBB72506, GBB72837, GBB73578, GBB74223, GBB79026, GBB79763, GBB80628, GBB81649, GBB82285, GBB85851, GBB86389 , GBB87121, GBB91404, GBB91848
Date Samples Collected:	April 2, 4, 9, 10, 13, 16-18, & 30, May 1-4, 14-16, 29 & 30, 2012
RCP Certification Form Included:	Yes
Lab Case Narrative Included:	Yes
Project Purpose:	Data will be used to verify the absence or presence and location of subsurface contamination, and to assess the potential pollutant impacts that may be encountered during construction
Notes:	

VOC Analysis Notes - Method 8260

(1) ICAL on 4/4/12, 4/5/2012, 4/6/12, 4/9/12, 4/11/12, 4/12/12, 4/13/12, 4/15/12, & 4/17/12 for Method 8260 did not meet the RCP RPDs for Methylene Chloride, trans-1,4-dichloro-2-butene, 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, Xylenes, Styrene, Hexachlorobutadiene, Naphthalene, 1,2,3-Trichlorobenzene

(2) CCV on 4/9/12 for Method 8260 did not meet the RCP RPDs for Naphthalene

(3) CCV on 4/11/12 for Method 8260 did not meet the RCP RPDs for Carbon Disulfide

(4) CCV on 4/12/12 & 4/13/12 for Method 8260 did not meet the RCP RPDs for Carbon Disulfide & Bromoform

(5) CCV on 4/15/12 for Method 8260 did not meet the RCP RPDs for Carbon Disulfide, 2,2-Dichloropropane, Bromodichloromethane, & 1,1,1,2-Tetrachloroethane

(6) ICAL on 4/16/12, 4/18/12 & 4/19/12, 4/21/12 for Method 8260 did not meet the RCP RPDs for Methyl Ethyl Ketone, trans-1,4-dichloro-2-butene, 1,2-Dibromo-3-chloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, Styrene, Hexachlorobutadiene, Naphthalene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene

(7) CCV on 4/18/12 for Method 8260 did not meet the RCP RPDs for 2,2-Dichloropropane

(8) ICAL on 4/20/12 for Method 8260 did not meet the RCP RPDs for Bromomethane

(9) CCV on 4/20/12 for Method 8260 did not meet the RCP RPDs for Acrolein, Tetrahydrofuran

(10) ICAL on 5/3/12 for Method 8260 did not meet the RCP RPDs for Acetone

(11) CCV on 5/3/12 for Method 8260 did not meet the RCP RPDs for Bromomethane, 2,2-Dichloropropane, trans-1,4-Dichloro-2-butene

(12) ICAL on 5/4/12 for Method 8260 did not meet the RCP RPDs for Acetone, Chloroethane, 2,2-Dichloropropane, 2-Hexanone, trans-1,4-Dichloro-2-butene, Naphthalene

(13) CCV on 5/4/12 for Method 8260 did not meet the RCP RPD for 2,2-Dichloropropene, Bromomethane, Acrolein, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Naphthalene, Acetone, 2-Hexanone

(14) ICAL on 5/7/12 & 5/8/12 for Method 8260 did not meet the RCP RPDs for Toluene, Xylenes, Styrene, Naphthalene, 2-Hexanone, trans-1,4-Dichloro-2-butene

(15) CCV on 5/8/12 for Method 8260 did not meet the RCP RPDs for Chloromethane, 2,2-Dichloropropane

(16) ICAL on 5/17/12 & 5/18/12 for Method 8260 did not meet the RCP RPDs for Acetone

(17) CCV on 5/17/12 & 5/18/12 for Method 8260 did not meet the RCP RPDs for Acetone, Bromoethane

(18) ICAL on 5/30/12 for Method 8260 did not meet the RCP RPDs for Methylene Chloride, trans-1,4-Dichloro-2-butene

(19) CCV on 5/30/12 & 5/31/12 for Method 8260 did not meet the RCP RPD for 2,2-Dichloropropene, Bromomethane, Tetrahydrofuran, trans-1,3-Dichloropropene, Styrene

SVOC Analysis Notes - Method 8270

(1) ICAL on 4/4/12, 4/5/12, & 4/11/12 for Method 8270 did not meet the RCP RPDs for Pentachlorophenol

(2) CCV on 4/4/12, 4/5/12, & 4/11/12 for Method 8270 did not meet the RCP RPDs for Pentachlorophenol, Atrazine, Benzo(a)pyrene, Acenaphthylene, % 2,4,6-Tribromophenol

(3) ICAL on 4/6/12 for Method 8270 did not meet the RCP RPDs for Aniline, Benzoic Acid, 4-Chloroaniline, 2,4-Dinitrophenol, Pentachlorophenol, Carbazole, 3,3-Dichlorobenzidine

(4) ICAL on 4/6/12 & 4/7/12 for Method 8270 did not meet the RCP response factors for 2-Nitrophenol

(5) CCV on 4/6/12 for Method 8270 did not meet the RCP RPDs for Benzyl Alcohol, 4-Chloroaniline, Hexachlorocyclopentadiene, 3,3'-Dichlorobenzidine

(6) ICAL on 4/7/12 for Method 8270 did not meet the RCP response factors for 2-Nitrophenol

(7) CCV on 4/7/12 for Method 8270 did not meet the RCP RPDs for Benzaldehyde, 4-Chloroaniline, 3,3'-Dichlorobenzidine

(8) ICAL on 4/12/12 for Method 8270 did not meet the RCP RPDs for 2,4-Dinitrophenol, 4-Chloroaniline, 4,6-Dinitro-2-methylphenol, 3,3'-Dichlorobenzidine

(9) ICAL on 4/12/12 for Method 8270 did not meet the RCP response factors for Hexachlorobenzene, Pentachlorophenol

(10) CCV on 4/12/12 for Method 8270 did not meet the RCP RPDs for 4-Chloroaniline, 2-Nitroaniline, % 2,4,6-Tribromophenol, Atrazine, Pentachlorophenol

(11) ICAL on 4/18/12 for Method 8270 did not meet the RCP RPDs for 3-Nitroaniline, Benzoic Acid, 2,4-Dinitrotoluene, Carbazole, 4-Chloroaniline, Hexachlorocyclopentadiene, 2-Nitroaniline, n-Nitrosodiphenylamine, Pentachlorophenol

(12) ICAL on 4/18/12 for Method 8270 did not meet the RCP response factors for 2-Nitrophenol, Hexachlorobenzene, % 2,4,6-Tribromophenol

(13) CCV on 4/18/12 for Method 8270 did not meet the RCP RPDs for 3-Nitroaniline

(14) ICAL on 5/4/12 for Method 8270 did not meet the RCP RPDs for Pentachlorophenol

(15) CCV on 5/3/12 for Method 8270 did not meet the RCP RPDs for Atrazine, Pentachloronitrobenzene

(16) ICAL on 5/7/12 for Method 8270 did not meet the RCP RPDs for 4-Chloroaniline, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Pentachlorophenol

(17) ICAL on 5/7/12, 5/8/12, 5/9/12, 5/18/12, & 5/20/12 for Method 8270 did not meet the RCP response factors for Hexachlorobenzene, 2-Nitrophenol

(18) CCV on 5/7/12 & 5/8/12 for Method 8270 did not meet the RCP RPDs for Pyridine, Benzaldehyde, Hexachlorocyclopentadiene, 1,2,4,5-Tetrachlorobenzene, Atrazine, %2,4,6-Tribromophenol, Pentachloronitrobenzene, n-Nitrosodimethylamine, Carbazole

(19) ICAL on 5/8/12, 5/9/12, 5/18/12, & 5/20/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol, Pentachlorophenol, Carbazole, 3-Nitroaniline

(20) CCV on 5/9/12 for Method 8270 did not meet the RCP RPDs for Benzaldehyde, Atrazine, %2,4,6-Tribromophenol, Pentachloronitrobenzene, n-Nitrosodimethylamine, Carbazole, 4-Chloroaniline, 3-Nitroaniline, 2-Nitroaniline, 4,6-Dinitro-2-methylphenol, Pyridine, Benzoic Acid, 2,4-Dimethylphenol

(21) CCV on 5/18/12 & 5/20/12 for Method 8270 did not meet the RCP RPDs for Benzaldehyde, Aniline, Pentachlophenol, 4,6-Dinitro-2-methylphenol, Benzoic Acid, 2,4-Dinitrophenol, Benzyl Alcohol, Ethyl Parathion, 3,3-Dichlorobenzidine

(22) ICAL on 6/5/12 for Method 8270 did not meet the RCP RPDs for Hexachlorocyclopentadiene, Pentachlorophenol

(23) ICAL on 6/5/12 for Method 8270 did not meet the RCP response factors for Hexachlorobenzene

(24) CCV on 6/5/12 for Method 8270 did not meet the RCP RPDs for Aniline, 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol, Benzyl Butyl Phthalate, Carbazole, Bis(e-ethylhexyl)phthalate