



OSPREY ENVIRONMENTAL ENGINEERING, LLC.

146 EAST MAIN STREET . CLINTON, CT 06413

PHONE: 860.669.8651

Mr. Scott Bartlett, Superintendent, Director of Public Works Operations
Fairfield Department of Public Works
725 Old Post Road
Fairfield, CT 06824

30 April 2018

Re: Soils Sampling, Grids A1-F1, L1, M1, Topsoil
Aggregate Recycling Yard Berm Project, Fairfield, CT
Collection date: 25 & 27 April 2018

Per your request, samples of soils from the above delineated site grids were collected to determine concentrations of constituents of concern (COCs) related to available environmental and health & safety standards and guidelines. Samples were composited from each grid and from the topsoil stockpile and were collected in new glassware supplied by the laboratory and stored in compliance with standard sample preservation procedures. The composite samples were submitted to Complete Environmental Testing, Inc., a Connecticut Certified Laboratory. Samples were compared to the DEEP Remediation Standards Regulations (RSRs) Direct Exposure Criteria (DEC) for environmental consideration. Samples were analyzed for PCBs, ETPH, arsenic, and lead. The following is a comparison of the results of the analyses to their respective evaluation criteria.

Sample Summary Table

COMPOUND	ETPH	Arsenic	Lead	PCBs
(Residential/Industrial & Commercial) mg/kg	500/2500	10/10	400/1000	1/10
Grid A1	3900	ND<1.1	7	ND<0.11
Grid B1	1700	3.1	25	ND<0.11
Grid B1	4100	2.2	55	ND<0.11
Grid D1	1500	6.3	18	ND<0.11
Grid E1	870	1.5	23	ND<0.11
Grid F1	900	2.6	29	0.29
Grid L1	1300	2.2	25	ND<0.11
Grid M1	940	2.0	53	ND<0.11
Topsoil stockpile	280	4.0	38	ND<0.11

Green is above the Residential DEC *Blue* is above the Residential & Industrial/Commercial DEC

The samples all had ETPH above the Residential DEC most likely due to the presence of asphalt fragments. Some samples had ETPH above the Industrial/Commercial DEC as well, which was expected as they had higher concentrations of asphalt. PCBs, arsenic and lead were all below the Residential and the Industrial/Commercial DEC.

Should you have any questions regarding the above, please contact me.

Sincerely,

Osprey Environmental Engineering, LLC.

Robert Grabarek, P.E., L.S., LEP
President

Client: Mr. Robert Grabarek
Osprey Enviromental
146 East Main St
Clinton, CT 06413

Analytical Report

CET# 8040951



Report Date: April 30, 2018
Project: Fairfield

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903



New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 8040951

Project: Fairfield

SAMPLE SUMMARY

The sample(s) were received at 14.6°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
F-1	8040951-01	Soil	4/27/2018 10:55	04/27/2018
E-1	8040951-02	Soil	4/27/2018 11:00	04/27/2018
D-1	8040951-03	Soil	4/27/2018 11:05	04/27/2018
B-1	8040951-04	Soil	4/27/2018 11:10	04/27/2018
Top Soil	8040951-05	Soil	4/27/2018 11:20	04/27/2018

CET #: 8040951

Project: Fairfield

Analyte: Percent Solids [SM 2540 G]

Analyst: PJB

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040951-01	F-1	88	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040951-02	E-1	87	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040951-03	D-1	89	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040951-04	B-1	89	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040951-05	Top Soil	85	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Prep: EPA 3051A

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040951-01	F-1	29	2.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:06	
8040951-02	E-1	23	2.2	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:11	
8040951-03	D-1	18	2.2	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:26	
8040951-04	B-1	55	2.2	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:30	
8040951-05	Top Soil	38	2.2	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:35	

Analyte: Total Arsenic [EPA 6010C]

Analyst: SS

Prep: EPA 3051A

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040951-01	F-1	2.6	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:06	
8040951-02	E-1	1.5	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:11	
8040951-03	D-1	6.3	1.1	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:26	
8040951-04	B-1	2.2	1.1	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:30	
8040951-05	Top Soil	4.0	1.1	mg/kg dry	1	B8D3039	04/30/2018	04/30/2018 15:35	

CET #: 8040951

Project: Fairfield

Client Sample ID F-1

Lab ID: 8040951-01

Conn. Extractable TPH

Analyst: MJH

Method: CT-ETPH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	900	57	1	EPA 3550C	B8D2812	04/28/2018	04/30/2018 03:31	R
<i>Surrogate: Octacosane</i>	<i>101 %</i>	<i>50 - 150</i>			B8D2812	04/28/2018	<i>04/30/2018 03:31</i>	
R C18-C36 unknown								

PCBs by ASE

Analyst: MPC

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1254	0.29	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 15:43	
<i>Surrogate: TCMX [1C]</i>	<i>120 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 15:43</i>	
<i>Surrogate: TCMX [2C]</i>	<i>132 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 15:43</i>	
<i>Surrogate: DCB [1C]</i>	<i>119 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 15:43</i>	
<i>Surrogate: DCB [2C]</i>	<i>117 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 15:43</i>	

CET #: 8040951

Project: Fairfield

Client Sample ID E-1

Lab ID: 8040951-02

Conn. Extractable TPH

Analyst: MJH

Method: CT-ETPH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	870	57	1	EPA 3550C	B8D2812	04/28/2018	04/30/2018 03:54	R
<i>Surrogate: Octacosane</i>	<i>105 %</i>	<i>50 - 150</i>			B8D2812	04/28/2018	<i>04/30/2018 03:54</i>	
R C18-C36 unknown								

PCBs by ASE

Analyst: MPC

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:01	
<i>Surrogate: TCMX [1C]</i>	<i>99.0 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:01</i>	
<i>Surrogate: TCMX [2C]</i>	<i>111 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:01</i>	
<i>Surrogate: DCB [1C]</i>	<i>99.7 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:01</i>	
<i>Surrogate: DCB [2C]</i>	<i>95.2 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:01</i>	

CET #: 8040951

Project: Fairfield

Client Sample ID D-1

Lab ID: 8040951-03

Conn. Extractable TPH

Method: CT-ETPH

Analyst: MJH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	1500	56	1	EPA 3550C	B8D2812	04/28/2018	04/30/2018 04:16	R
<i>Surrogate: Octacosane</i>	75.9 %	50 - 150			B8D2812	04/28/2018	04/30/2018 04:16	
R C18-C36 unknown								

PCBs by ASE

Method: EPA 8082A

Analyst: MPC

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:20	
<i>Surrogate: TCMX [1C]</i>	110 %	30 - 150			B8D2738	04/27/2018	04/27/2018 16:20	
<i>Surrogate: TCMX [2C]</i>	124 %	30 - 150			B8D2738	04/27/2018	04/27/2018 16:20	
<i>Surrogate: DCB [1C]</i>	102 %	30 - 150			B8D2738	04/27/2018	04/27/2018 16:20	
<i>Surrogate: DCB [2C]</i>	106 %	30 - 150			B8D2738	04/27/2018	04/27/2018 16:20	

CET #: 8040951

Project: Fairfield

Client Sample ID B-1

Lab ID: 8040951-04

Conn. Extractable TPH

Analyst: MJH

Method: CT-ETPH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	4100	56	1	EPA 3550C	B8D2816	04/28/2018	04/30/2018 13:23	1
<i>Surrogate: Octacosane</i>	<i>120 %</i>	<i>50 - 150</i>			B8D2816	04/28/2018	<i>04/30/2018 13:23</i>	
1	C18-C36 may be PNA Related							

PCBs by ASE

Analyst: MPC

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:38	
<i>Surrogate: TCMX [1C]</i>	<i>148 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:38</i>	
<i>Surrogate: TCMX [2C]</i>	<i>147 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:38</i>	
<i>Surrogate: DCB [1C]</i>	<i>150 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:38</i>	
<i>Surrogate: DCB [2C]</i>	<i>149 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:38</i>	

CET #: 8040951

Project: Fairfield

Client Sample ID Top Soil

Lab ID: 8040951-05

Conn. Extractable TPH

Analyst: MJH

Method: CT-ETPH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	280	59	1	EPA 3550C	B8D2816	04/28/2018	04/28/2018 15:56	R
<i>Surrogate: Octacosane</i>	<i>102 %</i>	<i>50 - 150</i>			B8D2816	04/28/2018	<i>04/28/2018 15:56</i>	
R C18-C36 unknown								

PCBs by ASE

Analyst: MPC

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1221	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1232	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1242	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1248	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1254	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1260	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1268	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
PCB-1262	ND	0.12	1	EPA 3545A	B8D2738	04/27/2018	04/27/2018 16:56	
<i>Surrogate: TCMX [1C]</i>	<i>94.0 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:56</i>	
<i>Surrogate: TCMX [2C]</i>	<i>105 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:56</i>	
<i>Surrogate: DCB [1C]</i>	<i>103 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:56</i>	
<i>Surrogate: DCB [2C]</i>	<i>98.9 %</i>	<i>30 - 150</i>			B8D2738	04/27/2018	<i>04/27/2018 16:56</i>	

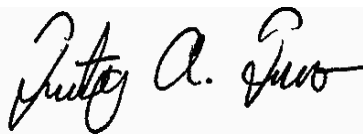
All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

This technical report was reviewed by Timothy Fusco



David Ditta
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- *C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- *C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- *F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- *F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

RL is the Reporting Limit.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>ASTM D4059-0 in Oil</i>	
PCB-1016	CT,RI,MA,NY
PCB-1221	CT,RI,MA,NY
PCB-1232	CT,RI,MA,NY
PCB-1242	CT,RI,MA,NY
PCB-1248	CT,RI,MA,NY
PCB-1254	CT,RI,MA,NY
PCB-1260	CT,RI,MA,NY
PCB-1268	CT,RI,MA,NY
PCB-1262	NY
<i>CT-ETPH in Soil</i>	
ETPH	CT
<i>EPA 6010C in Soil</i>	
Lead	CT,NY
Arsenic	CT,NY
<i>EPA 8082A in Soil</i>	
PCB-1016	CT,NY
PCB-1221	CT,NY
PCB-1232	CT,NY
PCB-1242	CT,NY
PCB-1248	CT,NY
PCB-1254	CT,NY
PCB-1260	CT,NY
PCB-1268	CT,NY
PCB-1262	NY
<i>SM 2540 G in Soil</i>	
Percent Solids	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
MA	Massachusetts Laboratory Certification	M-CT903	06/30/2018
NY	New York Certification (NELAC)	11982	04/01/2019
RI	Rhode Island Certification	LAO 00227	09/30/2018



8040951



COMPLETE ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

Additional Analysis

80 Lupus Drive
Stratford, CT 06615
Bottle Request e-mail: bottleorders@cetlabs.com

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com
cetlabs.com

Sample ID/Sample Depths

(include Units for any sample depths provided)

Collection Date/Time

Matrix
A=Air S=Soil
W=Water
DW=Drinking Water
C=Cassette
Solid
Other (Specify)

Turnaround Time **
(check one)
Same Day *
Next Day *
Two Day *
Three Day *
Std (5-7 Days)

8260 CT List
8260 Aromatics
8260 Halogens
CT ETPH
8270 CT List
8270 PNAs
PCBs SOX ASE
Pesticides
8 RCRA
13 Priority Poll
15 CT DEP
Total
SPLP
TCLP
Dissolved
Field Filtered
Lab to Filter

Metals
Additional Analysis
TOTAL # OF CONT.
NOTE #

Sample ID/Sample Depths	Collection Date/Time	Matrix	Turnaround Time **
E-1	4/27/18 10:55am	S	X
D-1	11:05am	S	L
B-1	11:10am	S	L
Top Soil	11:20am	S	L

PRESERVATIVE (Cl-HCl, N-HNO₃, S-H₂SO₄, Na-NaOH, C-Cool, O-Other)

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)

Soil VOCs Only (M=MeOH B=Bisulfate W=Water F=Vial E=Encore)

RELINQUISHED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

RELINQUISHED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

RELINQUISHED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

Client / Reporting Information

Company Name

D.E.C.

Address

City

State

Zip

Report To:

E-mail

Phone #

Fax #

bobg@cospreyer.com

Project: FF

Project Information

Location: Fairfield

PO #: _____

Project #: _____

CET Quote # _____

Collector(s): N Kent

QA/QC

Std

Site Specific (MS/MSD) *

RCP Pkg *

DOAW *

Data Report PDF

EDD - Specify Format

Other _____

RSR Reporting Limits (check one)

GA

GB

SWP

Other _____

Laboratory Certification Needed (check one)

CT

NY

RI

MA

Temp Upon Receipt _____ °C

Evidence of Cooling: N

PAGE _____

OF _____

* Additional charge may apply. ** TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day. All samples picked up by courier service will be considered next business day receipt for TAT purposes.

Client: Mr. Robert Grabarek
Osprey Enviromental
146 East Main St
Clinton, CT 06413

Analytical Report

CET# 8040866



Report Date: April 30, 2018
Project: Fairfield

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903



New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 8040866

Project: Fairfield

SAMPLE SUMMARY

The sample(s) were received at 16.2°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
A1	8040866-01	Soil	4/25/2018 13:40	04/25/2018
B1	8040866-02	Soil	4/25/2018 13:40	04/25/2018
L1	8040866-03	Soil	4/25/2018 13:40	04/25/2018
M1	8040866-04	Soil	4/25/2018 13:40	04/25/2018

CET # : 8040866

Project: Fairfield

Analyte: Percent Solids [SM 2540 G]

Analyst: PJB

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040866-01	A1	93	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040866-02	B1	90	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040866-03	L1	86	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	
8040866-04	M1	89	1.0	%	1	B8D2741	04/27/2018	04/27/2018 16:00	

Analyte: Total Lead [EPA 6010C]

Analyst: SS

Prep: EPA 3051A

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040866-01	A1	7.0	2.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:50	
8040866-02	B1	25	2.2	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:54	
8040866-03	L1	25	2.2	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:58	
8040866-04	M1	53	2.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:02	

Analyte: Total Arsenic [EPA 6010C]

Analyst: SS

Prep: EPA 3051A

Matrix: Soil

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040866-01	A1	ND	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:50	
8040866-02	B1	3.1	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:54	
8040866-03	L1	2.2	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 22:58	
8040866-04	M1	2.0	1.1	mg/kg dry	1	B8D2740	04/27/2018	04/27/2018 23:02	

CET #: 8040866

Project: Fairfield

Client Sample ID A1

Lab ID: 8040866-01

Conn. Extractable TPH

Analyst: MJH

Method: CT-ETPH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	3900	52	1	EPA 3550C	B8D2631	04/26/2018	04/30/2018 10:14	R
<i>Surrogate: Octacosane</i>	<i>99.9 %</i>	<i>50 - 150</i>			B8D2631	04/26/2018	<i>04/30/2018 10:14</i>	
R C18-C36 unknown								

PCBs by ASE

Analyst: MPC

Method: EPA 8082A

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:17	
<i>Surrogate: TCMX [1C]</i>	<i>92.6 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:17</i>	
<i>Surrogate: TCMX [2C]</i>	<i>104 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:17</i>	
<i>Surrogate: DCB [1C]</i>	<i>79.2 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:17</i>	
<i>Surrogate: DCB [2C]</i>	<i>75.9 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:17</i>	

CET #: 8040866

Project: Fairfield

Client Sample ID B1

Lab ID: 8040866-02

Conn. Extractable TPH

Method: CT-ETPH

Analyst: MJH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	1700	55	1	EPA 3550C	B8D2631	04/26/2018	04/30/2018 10:37	R
<i>Surrogate: Octacosane</i>	<i>103 %</i>	<i>50 - 150</i>			B8D2631	04/26/2018	<i>04/30/2018 10:37</i>	
R C18-C36 unknown								

PCBs by ASE

Method: EPA 8082A

Analyst: MPC

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:35	
<i>Surrogate: TCMX [1C]</i>	<i>93.6 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:35</i>	
<i>Surrogate: TCMX [2C]</i>	<i>106 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:35</i>	
<i>Surrogate: DCB [1C]</i>	<i>89.3 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:35</i>	
<i>Surrogate: DCB [2C]</i>	<i>86.9 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:35</i>	

CET #: 8040866

Project: Fairfield

Client Sample ID L1

Lab ID: 8040866-03

Conn. Extractable TPH

Method: CT-ETPH

Analyst: MJH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	1300	58	1	EPA 3550C	B8D2631	04/26/2018	04/30/2018 11:00	R
<i>Surrogate: Octacosane</i>	<i>100 %</i>	<i>50 - 150</i>			B8D2631	04/26/2018	<i>04/30/2018 11:00</i>	
R C18-C36 unknown								

PCBs by ASE

Method: EPA 8082A

Analyst: MPC

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1221	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1232	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1242	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1248	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1254	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1260	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1268	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
PCB-1262	ND	0.12	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 13:54	
<i>Surrogate: TCMX [1C]</i>	<i>80.0 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:54</i>	
<i>Surrogate: TCMX [2C]</i>	<i>90.6 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:54</i>	
<i>Surrogate: DCB [1C]</i>	<i>82.9 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:54</i>	
<i>Surrogate: DCB [2C]</i>	<i>80.0 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 13:54</i>	

CET #: 8040866

Project: Fairfield

Client Sample ID M1

Lab ID: 8040866-04

Conn. Extractable TPH

Method: CT-ETPH

Analyst: MJH

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
ETPH	940	56	1	EPA 3550C	B8D2631	04/26/2018	04/30/2018 11:22	R
<i>Surrogate: Octacosane</i>	<i>101 %</i>	<i>50 - 150</i>			B8D2631	04/26/2018	<i>04/30/2018 11:22</i>	
R C18-C36 unknown								

PCBs by ASE

Method: EPA 8082A

Analyst: MPC

Matrix: Soil

Analyte	Result (mg/kg dry)	RL (mg/kg dry)	Dilution	Prep Method	Batch	Prepared	Date/Time Analyzed	Notes
PCB-1016	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1221	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1232	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1242	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1248	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1254	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1260	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1268	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
PCB-1262	ND	0.11	1	EPA 3545A	B8D2625	04/26/2018	04/27/2018 14:12	
<i>Surrogate: TCMX [1C]</i>	<i>89.4 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 14:12</i>	
<i>Surrogate: TCMX [2C]</i>	<i>100 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 14:12</i>	
<i>Surrogate: DCB [1C]</i>	<i>96.5 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 14:12</i>	
<i>Surrogate: DCB [2C]</i>	<i>93.5 %</i>	<i>30 - 150</i>			B8D2625	04/26/2018	<i>04/27/2018 14:12</i>	

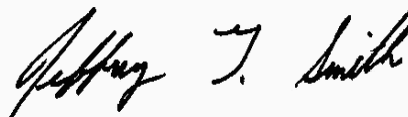
All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

This technical report was reviewed by Jeffrey Smith



David Ditta
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- *C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- *C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- *F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- *F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit

RL is the Reporting Limit.

All analyses were performed in house unless a Reference Laboratory is listed.

Samples will be disposed of 30 days after the report date.

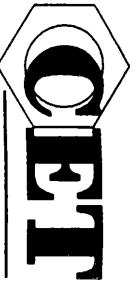
CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>ASTM D4059-0 in Oil</i>	
PCB-1016	CT,RI,MA,NY
PCB-1221	CT,RI,MA,NY
PCB-1232	CT,RI,MA,NY
PCB-1242	CT,RI,MA,NY
PCB-1248	CT,RI,MA,NY
PCB-1254	CT,RI,MA,NY
PCB-1260	CT,RI,MA,NY
PCB-1268	CT,RI,MA,NY
PCB-1262	NY
<i>CT-ETPH in Soil</i>	
ETPH	CT
<i>EPA 6010C in Soil</i>	
Lead	CT,NY
Arsenic	CT,NY
<i>EPA 8082A in Soil</i>	
PCB-1016	CT,NY
PCB-1221	CT,NY
PCB-1232	CT,NY
PCB-1242	CT,NY
PCB-1248	CT,NY
PCB-1254	CT,NY
PCB-1260	CT,NY
PCB-1268	CT,NY
PCB-1262	NY
<i>SM 2540 G in Soil</i>	
Percent Solids	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
MA	Massachusetts Laboratory Certification	M-CT903	06/30/2018
NY	New York Certification (NELAC)	11982	04/01/2019
RI	Rhode Island Certification	LAO 00227	09/30/2018



COMPLETE ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

Additional Analysis

80 Lupes Drive
Stratford, CT 06615
Bottle Request e-mail: bottleorders@cetlabs.com

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Sample ID/Sample Depths
(include Units for any sample depths provided)

Collection Date/Time

Matrix
A=Air S=Soil W=Water
DW=Drinking Water
C=Cassette
Solid Wipe Other (Specify)

Turnaround Time **
(check one)
Same Day *
Next Day *
Two Day *
Three Day *
Std (5-7 Days)

- 8260 CT List
- 8260 Aromatics
- 8260 Halogens
- CT ETPH
- 8270 CT List
- 8270 PNAs
- PCBs SOX ASE
- Pesticides
- 8 RCRA
- 13 Priority Poll
- 15 CT DEP
- Total
- SPLP
- TCLP
- Dissolved
- Field Filtered
- Lab to Filter

Metals

TOTAL # OF CONT.
NOTE #

A1
B1
L1
M1
7/25/18 1:40pm S

PRESERVATIVE (Cl-HCl, N-HNO₃, S-H₂SO₄, Na-NaOH, C-Cool, O-Other)

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)

Soil VOCs Only (M=MeOH B=Sulfate W=Water F=Vial Empty E=Envelope)

RELINQUISHED BY: DATE/TIME RECEIVED BY: DATE/TIME

RELINQUISHED BY: 7/25/18 2:10p RECEIVED BY: 04/25/18 Mearney 14:15

RELINQUISHED BY: DATE/TIME RECEIVED BY: DATE/TIME

Client / Reporting Information

Company Name: CSPREY

Address:

City: State: Zip:

Report To: E-mail:

Phone #: Fax #:

NOTES:

Project Information

Project: FARFIELD

PO #:

Location: AY

Project #:

CET Quote # Collector(s):

QA/QC Std EDD - Specify Format RCP Pkg * DOAW *

Data Report PDF GA GB SWP Other

RSR Reporting Limits (check one) CT NY RI MA

Laboratory Certification Needed (check one) N

Temp Upon Receipt: 16.2 °C Evidence of Cooling: N PAGE 1 OF 1

* Additional charge may apply. ** TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day. All samples picked up by courier service will be considered next business day receipt for TAT purposes.