



# OSPREY ENVIRONMENTAL ENGINEERING, LLC.

146 EAST MAIN STREET . CLINTON, CT 06413

PHONE: 860.669.8651 FAX: 860.664.3751

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

19 April 2018

Re: Soils Sampling, Grids A-D, Aggregate Recycling Yard Berm Project, Fairfield, CT  
Collection date: 09 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 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 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
(Residential/Industrial & Commercial) mg/kg	500/2500	10/10	400/1000
Grid A	<i>1200</i>	4.3	25
Grid B	<i>860</i>	3.6	19
Grid C	<i>570</i>	2.4	25
Grid D	<i>1100</i>	4.1	34

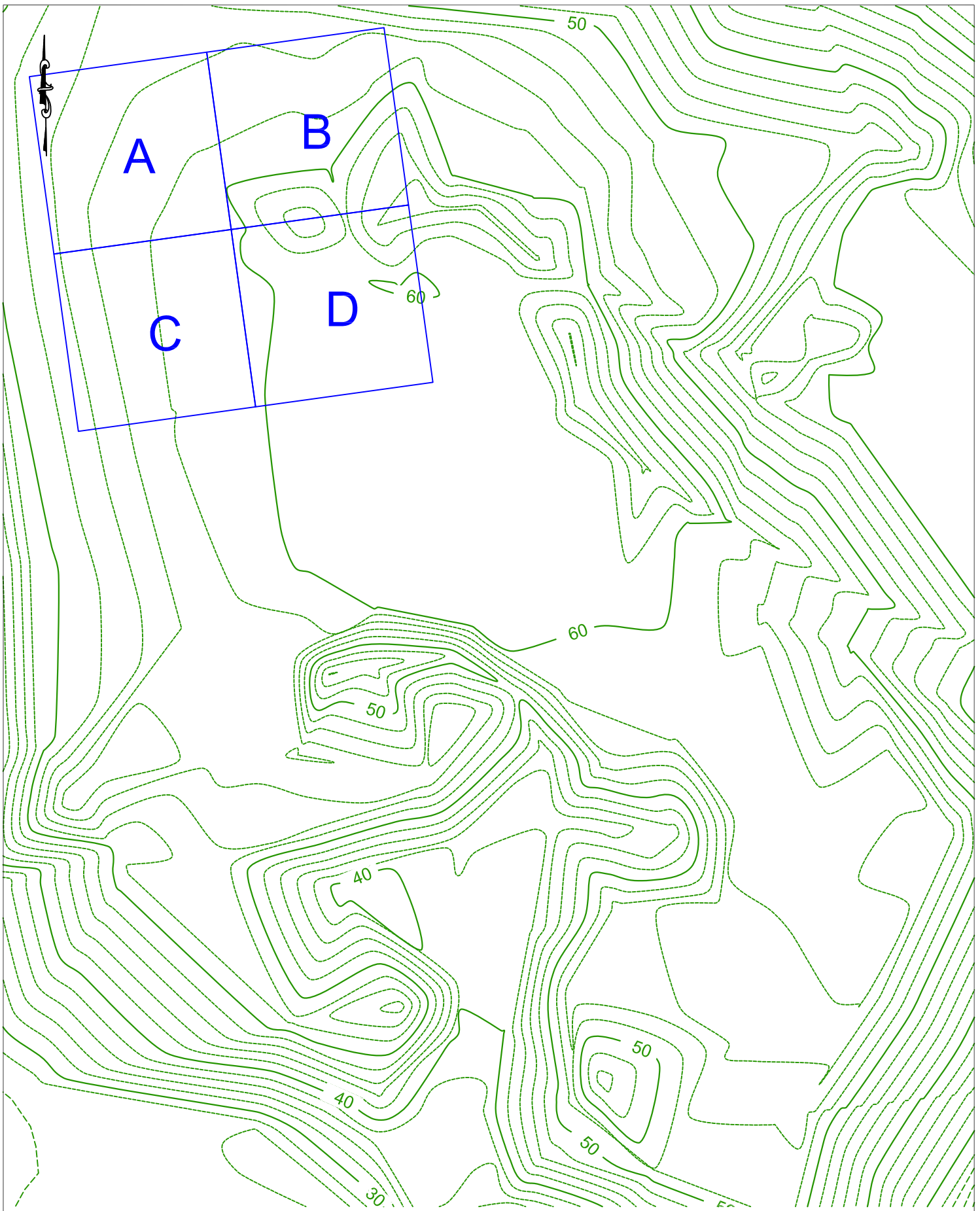
*Green* is above the Residential DEC *Blue* is above the Residential & Industrial/Commercial DEC

The samples all had ETPH above the Residential DEC but below the Industrial/Commercial DEC most likely due to the presence of asphalt fragments. Arsenic and lead were both 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



<p><b>A-1</b></p>	<p><b>AGGREGATE YARD SAMPLING GRID</b>  <b>DEPARTMENT OF PUBLIC WORKS FACILITY</b>  <b>90 ROD HIGHWAY, FAIRFIELD, CT</b></p>	<p><b>OSPREY</b>  <b>ENVIRONMENTAL ENGINEERING, LLC</b>          146 East Main Street          Clinton, CT 06413          Phone (860) 669-8651</p> 	<p><i>DRAWN BY: RJC</i>  <i>SCALE: 1"=40'</i>  <i>DATE: 04.17.18</i>  <i>REVISIONS:</i></p>
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80 Lupes Drive  
Stratford, CT 06615



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

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

# Analytical Report

## CET# 8040383R



Report Date: April 13, 2018  
Project: Fairfield

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



New York NELAP Accreditation: 11982  
Rhode Island Certification: 199

**SAMPLE SUMMARY**

The sample(s) were received at 4.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
FA1	8040383-01	Soil	4/09/2018 13:30	04/12/2018
FA2	8040383-02	Soil	4/09/2018 13:30	04/12/2018
FA3	8040383-03	Soil	4/09/2018 13:30	04/12/2018
FA4	8040383-04	Soil	4/09/2018 13:30	04/12/2018

CET # : 8040383

Project: Fairfield

**Analyte: Percent Solids [SM 2540 G]**

**Analyst: MPC**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040383-01	FA1	<b>89</b>	1.0	%	1	B8D1235	04/12/2018	04/12/2018 15:39	
8040383-02	FA2	<b>89</b>	1.0	%	1	B8D1235	04/12/2018	04/12/2018 15:39	
8040383-03	FA3	<b>92</b>	1.0	%	1	B8D1235	04/12/2018	04/12/2018 15:39	
8040383-04	FA4	<b>90</b>	1.0	%	1	B8D1235	04/12/2018	04/12/2018 15:39	

**Analyte: Total Lead [EPA 6010C]**

**Analyst: SS**

**Prep: EPA 3050B**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040383-01	FA1	<b>25</b>	2.3	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 12:48	
8040383-02	FA2	<b>19</b>	2.2	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 12:52	
8040383-03	FA3	<b>25</b>	2.2	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 13:05	
8040383-04	FA4	<b>34</b>	2.2	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 13:09	

**Analyte: Total Arsenic [EPA 6010C]**

**Analyst: SS**

**Prep: EPA 3050B**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8040383-01	FA1	<b>4.3</b>	1.1	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 12:48	
8040383-02	FA2	<b>3.6</b>	1.1	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 12:52	
8040383-03	FA3	<b>2.4</b>	1.1	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 13:05	
8040383-04	FA4	<b>4.1</b>	1.1	mg/kg dry	1	B8D1234	04/12/2018	04/13/2018 13:09	

CET # : 8040383

Project: Fairfield

**Client Sample ID FA1**

**Lab ID: 8040383-01**

**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
<b>ETPH</b>	<b>1200</b>	55	1	EPA 3550C	B8D1355	04/13/2018	04/13/2018 16:15	R
<i>Surrogate: Octacosane</i>	74.5 %	50 - 150			B8D1355	04/13/2018	04/13/2018 16:15	
R C18-C36 unknown								

**Client Sample ID FA2**

**Lab ID: 8040383-02**

**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
<b>ETPH</b>	<b>860</b>	56	1	EPA 3550C	B8D1355	04/13/2018	04/13/2018 16:08	R
<i>Surrogate: Octacosane</i>	77.1 %	50 - 150			B8D1355	04/13/2018	04/13/2018 16:08	
R C18-C36 unknown								

**Client Sample ID FA3**

**Lab ID: 8040383-03**

**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
<b>ETPH</b>	<b>570</b>	54	1	EPA 3550C	B8D1355	04/13/2018	04/13/2018 17:16	R
<i>Surrogate: Octacosane</i>	78.0 %	50 - 150			B8D1355	04/13/2018	04/13/2018 17:16	
R C18-C36 unknown								

CET # : 8040383

Project: Fairfield

**Client Sample ID FA4**

**Lab ID: 8040383-04**

**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
<b>ETPH</b>	<b>1100</b>	55	1	EPA 3550C	B8D1355	04/13/2018	04/13/2018 16:30	R
<i>Surrogate: Octacosane</i>	79.9 %	50 - 150			B8D1355	04/13/2018	04/13/2018 16:30	
R C18-C36 unknown								

**CASE NARRATIVE**

Revision: Original report dated (04/13/2018); revised to include ETPH analys for 8070383-01,-02,-03, and-04.

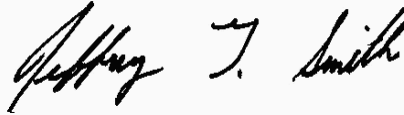
All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

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.



CET # : 8040383

Project: Fairfield

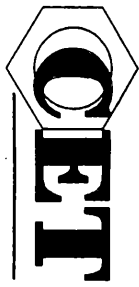
**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b><i>CT-ETPH in Soil</i></b>	
ETPH	CT
<b><i>EPA 6010C in Soil</i></b>	
Lead	CT,NY
Arsenic	CT,NY
<b><i>SM 2540 G in Soil</i></b>	
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
NY	New York Certification (NELAC)	11982	04/01/2019



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  
Tel: (203) 377-9984  
Fax: (203) 377-9952  
e-mail: cet1@celabs.com  
Bottle Request e-mail: bottleorders@celabs.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  
Additional Analysis  
TOTAL # OF CONT.  
NOTE #

FA1  
FA2  
FA3  
FA4

4/19/18 1:30p

S

9  
R

x Pb, As

PRESERVATIVE (Cl-HCl, N-HNO<sub>3</sub>, S-H<sub>2</sub>SO<sub>4</sub>, 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-Empty E-Encore)

REINQUISHED BY: DATE/TIME RECEIVED BY: Vial

REINQUISHED BY: DATE/TIME RECEIVED BY: 4/12/18 [Signature]

REINQUISHED BY: DATE/TIME RECEIVED BY:

### Client / Reporting Information

Company Name  
Address  
City State Zip  
Report To: E-mail  
Phone # Fax #

\* 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.

### NOTES:

Need for Friday

### Project Information

Project: PO #:  
Location: FT  
CET Quote # Fer J. L.  
QA/QC  Std  Site Specific (MS/MSD) \*  
Data Report  PDF  EDD - Specify Format  
RSR Reporting Limits (check one)  GA  GB  SWP  Other  
Laboratory Certification Needed (check one)  CT  NY  RI  MA  
Temp Upon Receipt  Y  N Evidence of Cooling:  
PAGE 1 OF 1