



# 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

06 June 2018

Re: Soils Sampling, Access Drive, Grid FE1 & HN1  
Aggregate Recycling Yard Berm Project, Fairfield, CT  
Collection date: 05 June 2018

Per your request, samples of soils from the above delineated site grids F (east), H (north), and the access drive were collected to determine concentrations of constituents of concern (COCs) related to available environmental and health & safety standards and guidelines. Samples were composited 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, mercury, 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	Mercury	PCBs
(Residential/Industrial & Commercial) mg/kg	500/2500	10/10	400/1000	20/610	1/10
Access Drive	<i>1600</i>	4.9	27	ND<0.14	<i>1.2</i>
Grid H north side	<i>2800</i>	5.0	28	ND<0.16	ND<0.13
Grid F east side	<i>1600</i>	<i>27</i>	40	ND<0.14	ND<0.12

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

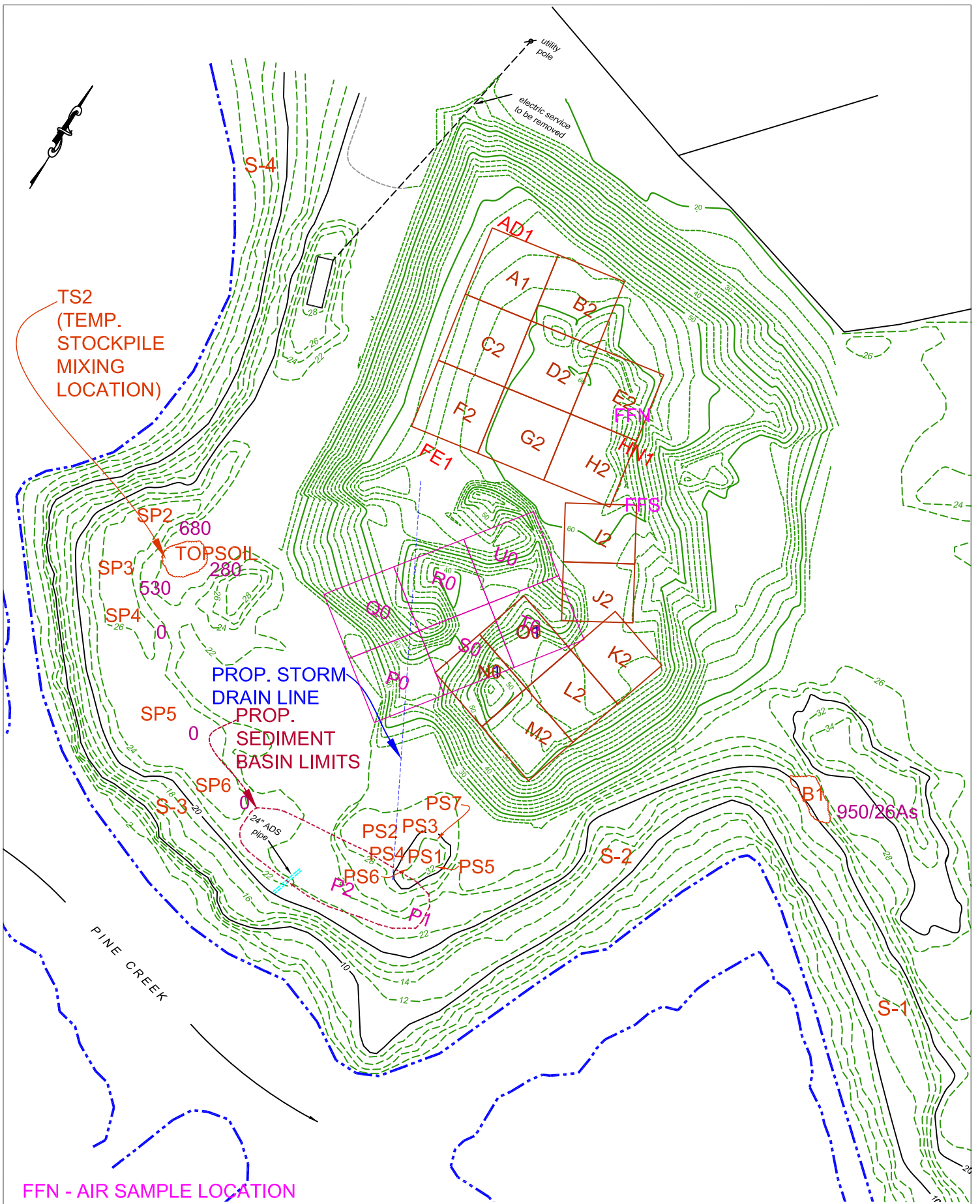
The samples all had ETPH above the Residential DEC, most likely due to the presence of asphalt fragments. Grid H had ETPH present above the Industrial/Commercial DEC, due to the asphalt millings. PCBs, arsenic and lead were all below the Residential and the Industrial/Commercial DEC except for the access drive sample which had PCBs slightly above the Residential DEC and Grid F which had arsenic above the Residential & Industrial/Commercial DEC (both set at 10 mg/kg).

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

Sincerely,

**Osprey Environmental Engineering, LLC.**

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



A-3

**AGGREGATE YARD SAMPLES**  
**DEPARTMENT OF PUBLIC WORKS FACILITY**  
**90 ROD HIGHWAY, FAIRFIELD, CT**

**OSPREY**  
**ENVIRONMENTAL ENGINEERING, LLC**  
 146 East Main Street  
 Clinton, CT 06413  
 Phone (860) 669-8651

**DRAWN BY: RJC**  
**SCALE: 1"=100'**  
**DATE: 06.06.18**  
**REVISIONS:**

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

# Analytical Report

## CET# 8060103



Report Date: June 06, 2018  
Project: Fairfield

Connecticut Laboratory Certificate: PH 0116  
Massachusetts Laboratory Certificate: M-CT903  
Rhode Island Laboratory Certificate: 199



New York NELAP Accreditation: 11982  
Pennsylvania Certificate: 68-02927

CET # : 8060103

Project: Fairfield

**SAMPLE SUMMARY**

The sample(s) were received at 21.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
AD1	8060103-01	Soil	6/05/2018 9:15	06/05/2018
HN1	8060103-02	Soil	6/05/2018 9:15	06/05/2018
FE1	8060103-03	Soil	6/05/2018 9:15	06/05/2018

CET # : 8060103

Project: Fairfield

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

**Analyst: DRL**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060103-01	AD1	86	1.0	%	1	B8F0510	06/05/2018	06/05/2018 12:53	
8060103-02	HN1	80	1.0	%	1	B8F0510	06/05/2018	06/05/2018 12:53	
8060103-03	FE1	85	1.0	%	1	B8F0510	06/05/2018	06/05/2018 12:53	

**Analyte: Mercury [EPA 7471B]**

**Analyst: SFJ**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060103-01	AD1	ND	0.14	mg/kg dry	1	B8F0505	06/05/2018	06/05/2018 14:55	
8060103-02	HN1	ND	0.16	mg/kg dry	1	B8F0505	06/05/2018	06/05/2018 14:58	
8060103-03	FE1	ND	0.14	mg/kg dry	1	B8F0505	06/05/2018	06/05/2018 15:01	

**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
8060103-01	AD1	27	2.3	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:05	
8060103-02	HN1	28	2.5	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:09	
8060103-03	FE1	40	2.3	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:13	

**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
8060103-01	AD1	4.9	1.2	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:05	
8060103-02	HN1	5.0	1.3	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:09	
8060103-03	FE1	27	1.1	mg/kg dry	1	B8F0529	06/05/2018	06/05/2018 20:13	

CET # : 8060103

Project: Fairfield

## Client Sample ID AD1

Lab ID: 8060103-01

## 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>1600</b>	57	1	EPA 3550C	B8F0518	06/05/2018	06/06/2018 09:19	
<i>Surrogate: Octacosane</i>	55.0 %		50 - 150		B8F0518	06/05/2018	06/06/2018 09:19	

## 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	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1221	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1232	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1242	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1248	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1254	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
<b>PCB-1260</b>	<b>1.2</b>	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1268	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
PCB-1262	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:20	
<i>Surrogate: TCMX [1C]</i>	107 %		30 - 150		B8F0516	06/05/2018	06/05/2018 12:20	
<i>Surrogate: TCMX [2C]</i>	106 %		30 - 150		B8F0516	06/05/2018	06/05/2018 12:20	
<i>Surrogate: DCB [1C]</i>	146 %		30 - 150		B8F0516	06/05/2018	06/05/2018 12:20	
<i>Surrogate: DCB [2C]</i>	126 %		30 - 150		B8F0516	06/05/2018	06/05/2018 12:20	

CET # : 8060103

Project: Fairfield

**Client Sample ID HN1**

**Lab ID: 8060103-02**

**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>2800</b>	61	1	EPA 3550C	B8F0518	06/05/2018	06/06/2018 09:42	
<i>Surrogate: Octacosane</i>	<i>71.0 %</i>		<i>50 - 150</i>		B8F0518	06/05/2018	<i>06/06/2018 09:42</i>	

**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	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1221	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1232	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1242	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1248	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1254	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1260	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1268	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
PCB-1262	ND	0.13	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:39	
<i>Surrogate: TCMX [1C]</i>	<i>97.1 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:39</i>	
<i>Surrogate: TCMX [2C]</i>	<i>92.2 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:39</i>	
<i>Surrogate: DCB [1C]</i>	<i>126 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:39</i>	
<i>Surrogate: DCB [2C]</i>	<i>116 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:39</i>	

CET # : 8060103

Project: Fairfield

**Client Sample ID FE1**

**Lab ID: 8060103-03**

**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>1600</b>	58	1	EPA 3550C	B8F0518	06/05/2018	06/06/2018 10:05	
<i>Surrogate: Octacosane</i>	<i>88.0 %</i>		<i>50 - 150</i>		B8F0518	06/05/2018	<i>06/06/2018 10:05</i>	

**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	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1221	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1232	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1242	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1248	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1254	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1260	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1268	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
PCB-1262	ND	0.12	1	EPA 3545A	B8F0516	06/05/2018	06/05/2018 12:58	
<i>Surrogate: TCMX [1C]</i>	<i>109 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:58</i>	
<i>Surrogate: TCMX [2C]</i>	<i>102 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:58</i>	
<i>Surrogate: DCB [1C]</i>	<i>116 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:58</i>	
<i>Surrogate: DCB [2C]</i>	<i>144 %</i>		<i>30 - 150</i>		B8F0516	06/05/2018	<i>06/05/2018 12:58</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 Robert Blake



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.

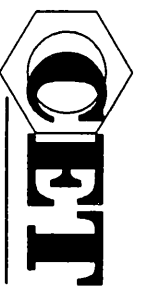
## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>CT-ETPH in Soil</i></b>	
ETPH	CT
<b><i>EPA 6010C in Soil</i></b>	
Lead	CT,NY,PA
Arsenic	CT,NY,PA
<b><i>EPA 7471B in Soil</i></b>	
Mercury	CT,NY,PA
<b><i>EPA 8082A in Soil</i></b>	
PCB-1016	CT,NY,PA
PCB-1221	CT,NY,PA
PCB-1232	CT,NY,PA
PCB-1242	CT,NY,PA
PCB-1248	CT,NY,PA
PCB-1254	CT,NY,PA
PCB-1260	CT,NY,PA
PCB-1268	CT,NY,PA
PCB-1262	NY,PA
<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
PA	Pennsylvania DEP	68-02927	05/31/2019



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  
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  
W-Drinking  
D=Cassette  
O=Water  
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

Metals  
8 RCRA  
13 Priority Poll  
15 CT DEP  
Total  
SPLP  
TCLP  
Dissolved  
Field Filtered  
Lab to Filter

TOTAL # OF CONT.  
NOTE #

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=Sulfuric W=Water F=Vial Empty E=Encore)

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

### Client / Reporting Information

Company Name  
Address  
City State Zip

Report To: E-mail

Phone # Fax #

NOTES:  
for Wed PM.

### Project Information

Project: Fairfield PO #: 12 Green  
Location: AF Collector(s): Green  
CET Quote # \_\_\_\_\_

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 21.0 °C Evidence of Cooling: Y  N  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.