



# 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

13 June 2018

Re: Soils Sampling, Sediment Pond SBE1, SBW1  
Aggregate Recycling Yard Berm Project, Fairfield, CT  
Collection date: 12 June 2018

Per your request, samples of soils from the sediment pond bottom 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
SBE1	<i>1100</i>	3.5	21	ND<0.14	ND<0.11
SBW1	<i>780</i>	3.8	30	ND<0.13	ND<0.11

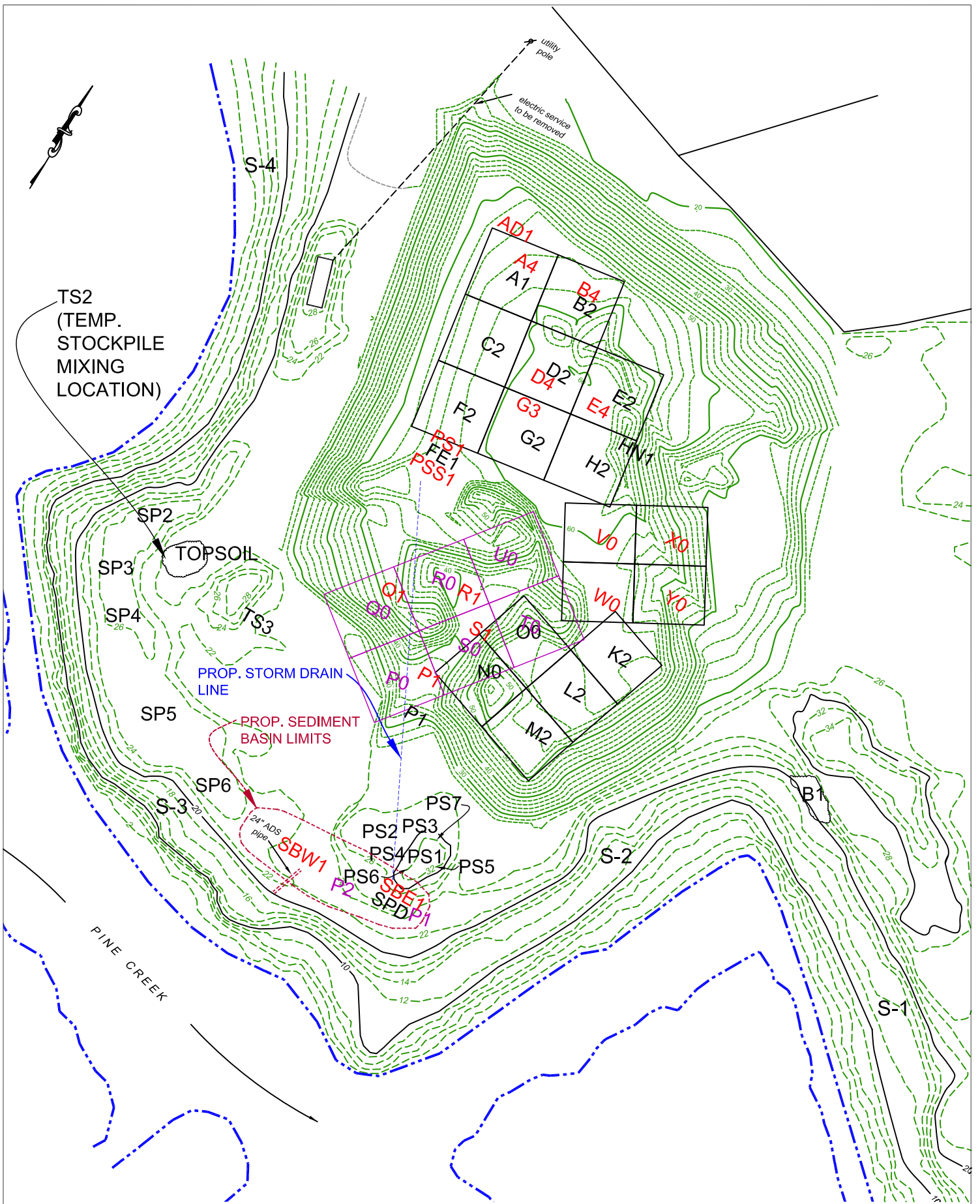
*Green* is above the Residential DEC *Blue* is above the Residential & Industrial/Commercial DEC

The samples had ETPH above the Residential DEC but below the Industrial/Commercial DEC, most likely due to the presence of asphalt fragments. 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



**A-6**

**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: 06.13.18  
REVISIONS:**

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

# Analytical Report

## CET# 8060379



Report Date: June 14, 2018  
Project: Fairfield  
Project Number: AY

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 # : 8060379

Project: Fairfield

Project Number: AY

**SAMPLE SUMMARY**

The sample(s) were received at 15.6°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
SBE1	8060379-01	Soil	6/12/2018 10:30	06/12/2018
SBW1	8060379-02	Soil	6/12/2018 10:30	06/12/2018

CET # : 8060379  
Project: Fairfield  
Project Number: AY

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

**Analyst: AMA**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060379-01	SBE1	90	1.0	%	1	B8F1303	06/13/2018	06/13/2018 10:55	
8060379-02	SBW1	88	1.0	%	1	B8F1303	06/13/2018	06/13/2018 10:55	

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

**Analyst: SFJ**

**Matrix: Soil**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060379-01	SBE1	ND	0.14	mg/kg dry	1	B8F1212	06/12/2018	06/12/2018 16:07	
8060379-02	SBW1	ND	0.13	mg/kg dry	1	B8F1212	06/12/2018	06/12/2018 16:10	

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

**Analyst: SS**

**Matrix: Soil**

**Prep: EPA 3051A**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060379-01	SBE1	21	2.1	mg/kg dry	1	B8F1405	06/14/2018	06/14/2018 13:55	
8060379-02	SBW1	30	2.3	mg/kg dry	1	B8F1405	06/14/2018	06/14/2018 13:59	

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

**Analyst: SS**

**Matrix: Soil**

**Prep: EPA 3051A**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
8060379-01	SBE1	3.5	1.0	mg/kg dry	1	B8F1405	06/14/2018	06/14/2018 13:55	
8060379-02	SBW1	3.8	1.1	mg/kg dry	1	B8F1405	06/14/2018	06/14/2018 13:59	

CET # : 8060379  
 Project: Fairfield  
 Project Number: AY

**Client Sample ID SBE1**

**Lab ID: 8060379-01**

**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>1100</b>	110	2	EPA 3550C	B8F1243	06/12/2018	06/13/2018 12:38	R
<i>Surrogate: Octacosane</i>	<i>101 %</i>		<i>50 - 150</i>		B8F1243	06/12/2018	<i>06/13/2018 12:38</i>	
R C18-C36 unknown								

**PCBs by ASE**

**Analyst: PJB**

**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	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1221	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1232	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1242	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1248	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1254	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1260	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1268	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
PCB-1262	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:36	
<i>Surrogate: TCMX [1C]</i>	<i>90.3 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:36</i>	
<i>Surrogate: TCMX [2C]</i>	<i>81.3 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:36</i>	
<i>Surrogate: DCB [1C]</i>	<i>85.8 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:36</i>	
<i>Surrogate: DCB [2C]</i>	<i>82.3 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:36</i>	

CET # : 8060379  
 Project: Fairfield  
 Project Number: AY

**Client Sample ID SBW1**

**Lab ID: 8060379-02**

**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>780</b>	110	2	EPA 3550C	B8F1243	06/12/2018	06/13/2018 13:02	R
<i>Surrogate: Octacosane</i>	<i>112 %</i>		<i>50 - 150</i>		B8F1243	06/12/2018	<i>06/13/2018 13:02</i>	
R C18-C36 unknown								

**PCBs by ASE**

**Analyst: PJB**

**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	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1221	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1232	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1242	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1248	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1254	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1260	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1268	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
PCB-1262	ND	0.11	1	EPA 3545A	B8F1305	06/13/2018	06/13/2018 13:55	
<i>Surrogate: TCMX [1C]</i>	<i>88.3 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:55</i>	
<i>Surrogate: TCMX [2C]</i>	<i>77.9 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:55</i>	
<i>Surrogate: DCB [1C]</i>	<i>81.7 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:55</i>	
<i>Surrogate: DCB [2C]</i>	<i>76.7 %</i>		<i>30 - 150</i>		B8F1305	06/13/2018	<i>06/13/2018 13:55</i>	

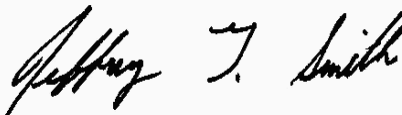
All questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

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**

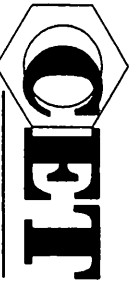
Analyte	Certifications
<b><i>CT-ETPH in Soil</i></b>	
ETPH	CT
<b><i>EPA 6010C in Soil</i></b>	
Lead	CT,NY,PA
Arsenic	CT,NY,PA
<b><i>EPA 7471B in Soil</i></b>	
Mercury	CT,NY,PA
<b><i>EPA 8082A in Soil</i></b>	
PCB-1016	CT,NY,PA
PCB-1221	CT,NY,PA
PCB-1232	CT,NY,PA
PCB-1242	CT,NY,PA
PCB-1248	CT,NY,PA
PCB-1254	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



8060379



COMPLETE ENVIRONMENTAL TESTING, INC.

# CHAIN OF CUSTODY

Volatile Soils Only:

Date and Time in Freezer

Client:

CET:

Additional Analysis

Client:

CET:

80 Lupes Drive  
Stratford, CT 06615

Tel: (203) 377-9984  
Fax: (203) 377-9952  
e-mail: cet1@celtads.com  
bottleorders@celtads.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 Waste  
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 #

SBRT  
S3W1

6/12/18 10:30am

Same Day \*  
 Next Day \*  
 Two Day \*  
 Three Day \*  
 Std (5-7 Days)

PRESERVATIVE: (CH-Cl, 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=Sodium Bisulfate W=Water F=Vial Empty E=Encore)

REMOVED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

REMOVED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

REMOVED BY:

DATE/TIME

RECEIVED BY:

DATE/TIME

## Client / Reporting Information

Company Name

Address

City

State

Zip

Report To:

E-mail

Phone #

Fax #

## Project Information

Project:

FAIRFIELD

PO #:

Location:

HY

Project #:

CET Quote #

Collector(s):

PERABERT

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  Evidence of Cooling:  Y  N PAGE 1 OF 1

NOTES:

\* 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.