EA Engineering, Science, and Technology, Inc.

Airport Professional Park
2350 Post Road
Warwick, Rhode Island 02886
Telephone: 401-736-3440
Fax: 401-736-3423
www.eaest.com

19 May 2010

Mr. Timothy Fluery
RI Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908

RE: Sampling and Analysis of Depositional Sediment
Lincoln Lace and Braid
Ponagansett Avenue; Providence, Rhode Island
EA Project No. 61891.05.0009
RIDEM Case No. 2009-018

Dear Mr. Fluery:

EA Engineering, Science, and Technology, Inc. (EA), on behalf of the City of Providence (the City), is providing this letter report to summarize the collection of depositional sediment and soils from three locations at the former Lincoln Lace and Braid (LLB) property located at 55 Ponagansett Street, Providence, RI (the "Site") (Figure 1).

The Rhode Island Legal Service (RILS), on behalf of the Hartford Park Residents Association, has requested sampling and analysis of depositional sediments at the Site to determine potential impacts from the flooding of April 2010. This sampling was requested based on the presence of the Centerville Manor Superfund Site, located upriver from the LLB Site. The Centerville Manor investigation has demonstrated sediments are impacted with 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (2,3,7,8-TCDD). Remediation has been conducted to remediate the release to cleanup standards established by the US Environmental Protection Agency (USEPA).

DEPOSITIONAL SEDIMENT SAMPLING AND ANALYSIS

The subject site is adjacent to the Woonasquatucket River, immediately south of Glenbridge Avenue. A walkthrough of the Site conducted after the flood waters receded indicated that the entire Site was inundated. EA determined several locations to conduct the sampling to determine if 2,3,7,8-TCDD was deposited across the Site.

On 6 May 2010, EA collected three composite samples from the locations depicted on Figure 2, attached. The composite soil samples were collected using a hand auger and were collected from the 0 – 1 ft interval in four discrete locations within one foot surrounding the location depicted on Figure 2. Each sample was composited in disposable trays prior to placement in laboratory cleaned glassware. The samples were then chilled in a cooler with ice and delivered to a Rhode Island Certified Laboratory under standard chain of custody protocols. The analytical results are provided in Table 1, below.

Table 1 – Depositional Sediment Sampling Analytical Results						
Target Analyte	**LLB-1**	**LLB-2**	**LLB-3**	**RIDEM Residential Standard**	**EPA Residential Screening Level**	**EPA Residential Action Level**
2,3,7,8-TCDD	43	120	68	4.3	50	1,000

Notes:
1. All concentrations shown in nanograms per kilogram (ng/kg (parts per trillion)).
2. EPA Residential Screening Level and Action Level per EPA Agency for Toxic Substances and Disease Registry (ATSDR) – Fed. Reg. 61,133.

The analytical results indicate that 2,3,7,8-TCDD is present in depositional sediment and/or native soils at the Site. Concentrations range from 43 nanograms per kilogram (ng/kg (parts per trillion)) to 120 ng/kg. The cleanup standard established for the Centerville Manor Site in North Providence is equal to 1,000 ng/kg in sediment. RIDEM has established a 4.3 ng/kg residential direct exposure standard for other projects currently ongoing in the Providence area. EPA currently recommends a 50 ng/kg Screening Level and a 1,000 ng/kg Action Level for residential sites.

Based on the analytical data, EA and the City of Providence propose to move forward with the proposed remediation at the Site, which includes construction of an engineered barrier to prevent direct exposure to contaminated surface soils. The implementation of this remedial alternative would prevent exposure of these depositional sediments to the public.

If you have any questions or require additional information, please contact me at (401) 736-3440, Ext. 203.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC.

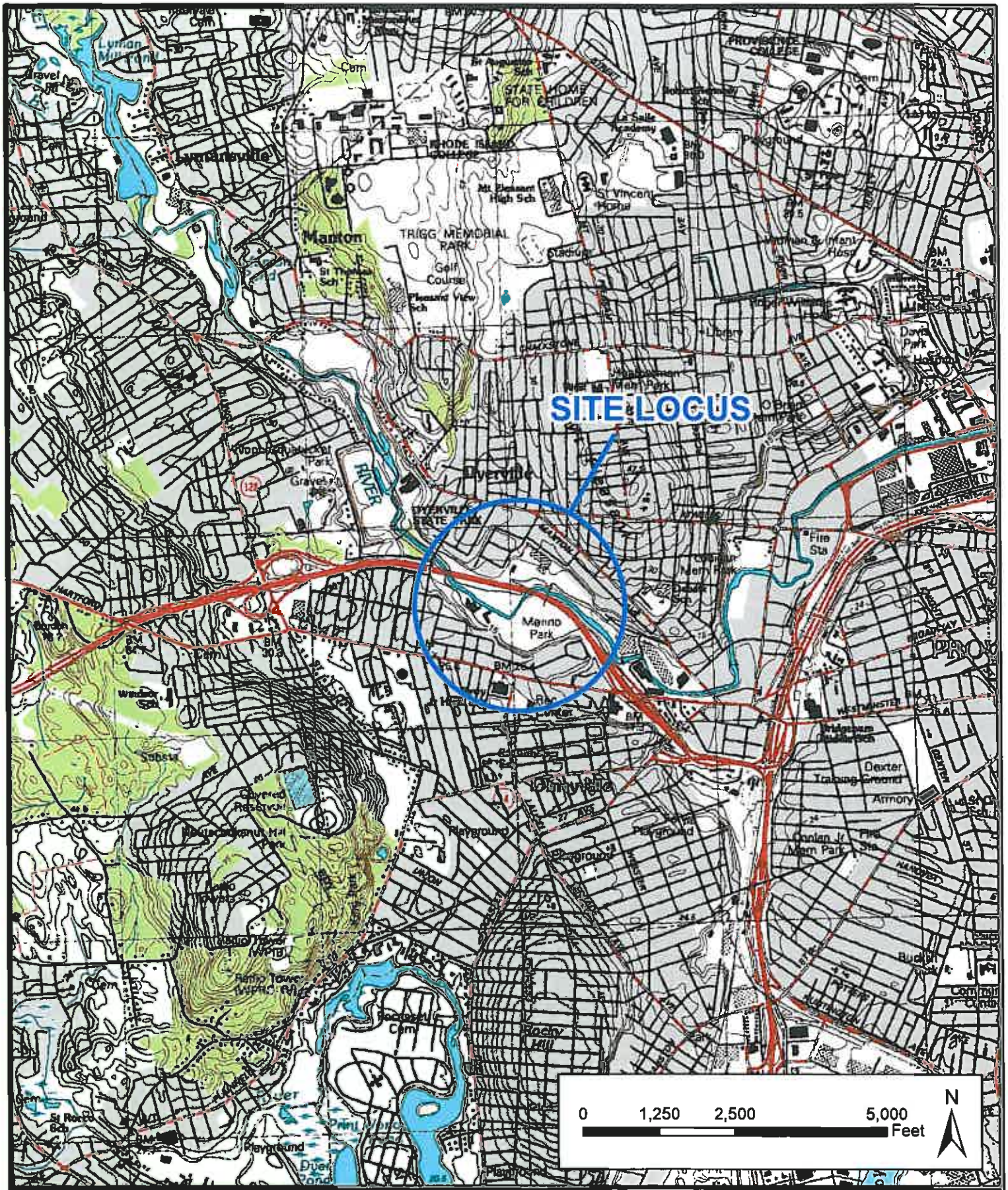
Frank B. Postma, LSP, LEP, PG
Senior Project Manager

Attachments
Attachment A: Depositional Sediment Analytical Report

Figures
Figure 1: Site Location Map
Figure 2: Sampling Plan

cc: Robert McMahon, Providence Parks Department
Alan Peterson, U.S. Environmental Protection Agency
Sam Whitin, EA Engineering, Science, and Technology, Inc.

Figures



EA	LINCOLN LACE & BRAID 55 PONAGANSETT STREET PROVIDENCE, RI					FIGURE 1 SITE LOCUS	
PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
FBP	RM	PT	FBP	AS SHOWN	APRIL 2010	61891.05	LLB_LOCUS.MXD

Legend:

- PROPERTY BOUNDARY
- TAILRACE EXTENT
- 10-FOOT ELEVATION CONTOUR
- 2-FOOT ELEVATION CONTOUR
- EXTENT OF VEGETATION
- CENTRAL LOCATION OF COMPOSITE SAMPLE

PROPERTY LINE AP 113, LOT 429

A.P. 113 LOT 440

STATE OF RHODE ISLAND (ROUTE 6 EXPRESSWAY)

APPROXIMATE EDGE OF RIVER

WOONASQUATUCKET RIVER

REMAINING CONCRETE SLAB

BENCHMARK
CROSS CUT ON FIRE HYDRANT BONNET BOLT
ELEV=42.28 (NGVD'29)

BENCHMARK
RAILROAD SPIKE IN 36" OAK
ELEV=43.83 (NGVD'29)

A.P. 113 LOT 428

A.P. 113 LOT 305

LLB-1

LLB-2

LLB-3

PROPERTY LINE AP 113, LOT 305

A.P. 113 LOT 439

EXISTING TAILRACE

Barbara Street (40' PUBLIC R.O.W.)

Ponaganset Avenue (40' PUBLIC R.O.W.)

A.P. 113 LOT 406

A.P. 113 LOT 407

A.P. 113 LOT 408

A.P. 113 LOT 409

A.P. 106 LOT 8

100 YEAR FLOOD PLAIN LINE

PROPERTY LINE AP 113, LOT 428

80 40 0 80

GRAPHIC SCALE IN FEET

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.	FILE NAME
RGM	RGM	5-19-2010	61891.05	-
CHECKED BY	PROJECT MGR.	SCALE	DRAWING NO.	FIGURE
FBP	FBP	1" = 80'	-	2

LINCOLN LACE AND BRAID
REMEDIATION PROJECT
PROVIDENCE, RHODE ISLAND

SAMPLING LOCATIONS
FIGURE 2

Attachment A

Depositional Sediment Analytical Report

6 May 2010

CERTIFICATE OF ANALYSIS

Frank Postma
EA Engineering, Science, and Technology
333 Turnpike Road
Southborough, MA 01772

RE: Lincoln Lace & Braid (61891.05)
ESS Laboratory Work Order Number: 1005092

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Digitally signed by Laurel Stoddard
Date: 2010.05.18 09:09:00 -04'00'

Laurel Stoddard
Laboratory Director

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Pace Analytical™

www.pacelabs.com

Report Prepared for:

Elizabeth Ouk
ESS Laboratory
185 Frances Avenue
Cranston RI 02910

REPORT OF LABORATORY ANALYSIS FOR TCDD

Report Information:

Pace Project #: 10128300
Sample Receipt Date: 05/07/2010
Client Project #: Lincoln Lace
Client Sub PO #: 1005092
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 2,3,7,8-TCDD Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

May 17, 2010

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
May 17, 2010

ACCREDITED IN ACCORDANCE WITH nelac

Report of Laboratory Analysis

The results relate only to the samples included in this report.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on three samples submitted by a representative of ESS Laboratory. The samples were analyzed for the presence or absence of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) using a modified version of USEPA Method 1613B. The reporting limits were set to correspond to the lowest calibration point and a nominal 10-gram sample amount.

The recoveries of the isotopically-labeled TCDD internal standard in the sample extracts ranged from 72-75%. All of the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1613B. Also, since the quantification of the native TCDD was based on isotope dilution, the data were automatically corrected for recovery and accurate values were obtained.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show that 2,3,7,8-TCDD was not detected, indicating that the sample processing steps were free of background levels of this congener.

A laboratory spike sample was also prepared using clean sand that had been fortified with native standard material. The results show that the spiked native TCDD was recovered at 100%. These results indicate a high degree of accuracy for these determinations. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from these analyses will be provided upon request.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid

ESS Laboratory Work Order: 1005092

SAMPLE RECEIPT

The following samples were received on May 06, 2010 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	SampleName	Matrix	Analysis
1005092-01	2010-LLB-1	Solid	§
1005092-02	2010-LLB-2	Solid	§
1005092-03	2010-LLB-3	Solid	§

Sample Condition Upon Receipt

Pace Analytical

Client Name: ESS lab **Project #** 10128300

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z037497014600 5629

Custody Seal on Cooler/Box Present: ☐ yes ☒ no **Seals Intact:** ☐ yes ☒ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____ **Temp Blank:** Yes ____ No X

Thermometer Used 80344042 or 179425 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.8°c **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and initials of person examining contents: BS 5-7-10

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☒No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: **Field Data Required?** Y / N

Person Contacted: _____ **Date/Time:** _____

Comments/ Resolution: _____

Project Manager Review: (W) **Date:** 05/07/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid

ESS Laboratory Work Order: 1005092

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid
Client Sample ID: 2010-LLB-1
Date Sampled: 05/06/10 11:45

ESS Laboratory Work Order: 1005092
ESS Laboratory Sample ID: 1005092-01
Sample Matrix: Solid

Classical Chemistry

Analyte	Results (MRL)	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Dioxin	See Attached (N/A)							

Pace Analytical Services, Inc.
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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - ESS Laboratory

Client's Sample ID	1005092-01		
Lab Sample ID	10128300001		
Filename	F100517B_04		
Injected By	SMT		
Total Amount Extracted	16.0 g	Matrix	Solid
% Moisture	36.2	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	05/06/2010 11:45
ICAL ID	F100424	Received	05/07/2010 09:11
CCal Filename(s)	F100517B_01	Extracted	05/13/2010 13:30
Method Blank ID	BLANK-24933	Analyzed	05/17/2010 13:20

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDD	43	—	1.0	2,3,7,8-TCDD-13C	2.00	72
				Recovery Standard 1,2,3,4-TCDD-13C	2.00	NA
				Cleanup Standard 2,3,7,8-TCDD-37Cl4	0.20	71

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

REPORT OF LABORATORY ANALYSIS

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid
Client Sample ID: 2010-LLB-2
Date Sampled: 05/06/10 12:00

ESS Laboratory Work Order: 1005092
ESS Laboratory Sample ID: 1005092-02
Sample Matrix: Solid

Classical Chemistry

Analyte	Results (MRL)	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Dioxin	See Attached (N/A)							

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Minneapolis, MN 55414

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Method 1613B Sample Analysis Results

Client - ESS Laboratory

Client's Sample ID	1005092-02		
Lab Sample ID	10128300002		
Filename	F100517B_06		
Injected By	SMT		
Total Amount Extracted	13.0 g	Matrix	Solid
% Moisture	21.8	Dilution	NA
Dry Weight Extracted	10.2 g	Collected	05/06/2010 12:00
ICAL ID	F100424	Received	05/07/2010 09:11
CCal Filename(s)	F100517B_01	Extracted	05/13/2010 13:30
Method Blank ID	BLANK-24933	Analyzed	05/17/2010 14:58

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDD	120	—	1.0	2,3,7,8-TCDD-13C	2.00	73
				Recovery Standard 1,2,3,4-TCDD-13C	2.00	NA
				Cleanup Standard 2,3,7,8-TCDD-37Cl4	0.20	77

Conc = Concentration (Totals Include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

REPORT OF LABORATORY ANALYSIS

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid
Client Sample ID: 2010-LLB-3
Date Sampled: 05/06/10 12:30

ESS Laboratory Work Order: 1005092
ESS Laboratory Sample ID: 1005092-03
Sample Matrix: Solid

Classical Chemistry

Analyte	Results (MRL)	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Dioxin	**See Attached (N/A)**							

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - ESS Laboratory

Client's Sample ID	1005092-03		
Lab Sample ID	10128300003		
Filename	F100517B_07		
Injected By	SMT		
Total Amount Extracted	12.4 g	Matrix	Solid
% Moisture	13.7	Dilution	NA
Dry Weight Extracted	10.7 g	Collected	05/06/2010 12:30
ICAL ID	F100424	Received	05/07/2010 09:11
CCal Filename(s)	F100517B_01	Extracted	05/13/2010 13:30
Method Blank ID	BLANK-24933	Analyzed	05/17/2010 15:47

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDD	68	—	1.0	2,3,7,8-TCDD-13C	2.00	75
				Recovery Standard 1,2,3,4-TCDD-13C	2.00	NA
				Cleanup Standard 2,3,7,8-TCDD-37Cl4	0.20	81

Conc = Concentration (Totals include 2,3,7,8-substituted Isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

REPORT OF LABORATORY ANALYSIS

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid

ESS Laboratory Work Order: 1005092

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier

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Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-24933	Matrix	Solid
Filename	F100517B_05	Dilution	NA
Total Amount Extracted	10.3 g	Extracted	05/13/2010 13:30
ICAL ID	F100424	Analyzed	05/17/2010 14:09
CCal Filename(s)	F100517B_01	Injected By	SMT

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDD	ND	—	1.0	2,3,7,8-TCDD-13C	2.00	73
				Recovery Standard 1,2,3,4-TCDD-13C	2.00	NA
				Cleanup Standard 2,3,7,8-TCDD-37Cl4	0.20	77

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCS-24934		
Filename	F100517B_02	Matrix	Solid
Total Amount Extracted	11.6 g	Dilution	NA
ICAL ID	F100424	Extracted	05/13/2010 13:30
CCal Filename	F100517B_01	Analyzed	05/17/2010 11:44
Method Blank ID	BLANK-24933	Injected By	SMT

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDD	10	10	7.3	14.6	100
2,3,7,8-TCDD-37Cl4	10	8.1	3.7	15.8	81
2,3,7,8-TCDD-13C	100	78	25.0	141.0	78

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

REPORT OF LABORATORY ANALYSIS

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid

ESS Laboratory Work Order: 1005092

Notes and Definitions

Z-08	See Attached
ND	Analyte NOT DETECTED above the detection limit (LOD for DoD Reports)
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
LOD	Limit of Detection
[CALC]	Calculated Analyte

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Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering, Science, and Technology
Client Project ID: Lincoln Lace & Braid

ESS Laboratory Work Order: 1005092

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)
A2LA Accredited: Testing Cert# 2864.01
http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/labs/waterlabs-instate.php

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/out_state.pdf

Maine Potable and Non Potable Water: RI0002
http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424
http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301
http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

South Carolina Volatile Organic Compounds in Potable Water: 78003

New Jersey Non Potable Water (RCRA), Solids and Hazardous Waste: RI002
http://www.nj.gov/dep/oqa/certlabs.htm

Pensylvania Potable and Non Potable Water, Solid and Hazardous Waste: 68-01752
http://files.dep.state.pa.us/RegionalResources/Labs/LabsPortalFiles/2009-0911_accredited_laboratories.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01
Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)
http://www.A2LA.org/dirsearchnew/newsearch.cfm

CPSC ID# 1141
Lead Paint, Lead in Children's Metals Jewelry
http://www.cpsc.gov/cgi-bin/labapplist.aspx

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN00064_2000
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101
Georgia (DNR)	959	Oklahoma	D9922
Guam	09-019r	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN200001-005
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana		South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	LA0900016	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

ESS Laboratory

Pace

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page_____ of_____

Turn Time X Standard Other 5 Days
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA (RI) CT NH NJ NY ME Other _____

Is this project for any of the following:
MA-MCP Navy USACE Other _____

Reporting Limits

ESS LAB PROJECT ID

Electronic Deliverable Yes X No ___
Format: Excel X Access ___ PDF X Other _____

Co. Name	Project #	Project Name (20 Char. or less) Lincoln Lace
Contact Person Liz Ouk	Address	
City State Zip		PO# 1005092
Telephone #	Fax #	Email Address

ESS LAB Sample #	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Write Required Analysis: 2, 3, 7, 8 TCLP
	5/6/10	11:45	X		S	1005092 - 01	1	1	G	X
	5/6/10	12:00	X		S	1005092 - 02	1	1	G	X
	5/6/10	12:30	X		S	1005092 - 03	1	1	G	X

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present X Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: _____

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Preservation Code 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____

Sampled by:

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	5/6/10 17:30						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/28/04 A

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CHAIN OF CUSTODY

Page 1 of 1

Turn Time: X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: MA (RI) CT NH NJ NY ME Other ____
Is this project for any of the following: MA-MCP Navy USACE Other ____

Reporting Limits: 1 ppt
ESS LAB PROJECT ID: 1005092
Electronic Deliverable: X Yes ___ No
Format: Excel X Access PDF X Other ____

Co. Name	Project #	Project Name (20 Char. or less)
EA Engineering	61891.05	Lincoln, Lee, & Bond

Contact Person	Address
Frank Postma	2350 Post Road

City	State	Zip	PO#
Warwick	RI	02886	

Telephone #	Fax #	Email Address
401-736-3440	401-736-3423	fpostma@eaest.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Write Required Analysis: 2378 TCDD
01	5/6/10	1145	X		S	2010-LLB-1	1	1	G	X
02	5/6/10	1200	X		S	2010-LLB-2	1	1	G	X
03	5/6/10	1230	X		S	2010-LLB-3	1	1	G	X

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: X Yes ___ No
Seals Intact: ___ Yes ___ No NA: ___
Cooler Temp: 4.4

Internal Use Only
[ ] Pickup
[ ] Technicians ____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- ____

Sampled by: P. Theroux

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	5/6/10 1700	[signature]	5/6/10 17:00				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt