



E n v i r o n m e n t a l C o n s u l t i n g G r o u p , I n c .

REPORT
Environmental Survey
P816 Phase V
Tank 11E
Naval Station Great Lakes
Great Lakes, Illinois

Prepared for:

Ms. Judy Fassbender
Bloom Companies, LLC
10501 W. Research Drive, Suite 100
Milwaukee, Wisconsin 53226

Prepared by:

Environmental Consulting Group, Inc.
411 S. Wells Street, Suite 700
Chicago, Illinois 60607
(312) 663-3900
www.ecgmidwest.com

ECG Project Number: A111305-104
Date: March 28, 2011



E n v i r o n m e n t a l C o n s u l t i n g G r o u p , I n c .

March 28, 2011

Ms. Judy Fassbender
Bloom Companies, LLC
10501 W. Research Drive, Suite 100
Milwaukee, Wisconsin 53226

Re: Environmental Survey Report – Soil, Asbestos, Lead-based Paint Sampling
Above-Ground Storage Tank
Tank 11E
Naval Station Great Lakes
Great Lakes, Illinois

Dear Ms. Fassbender:

Environmental Consulting Group, Inc. (ECG) has completed an Environmental Survey for the above-ground storage tank (11E) located adjacent to Building 11 at the Naval Station Great Lakes, in Great Lakes, Illinois. The purpose of the survey was to determine the presence, location, and quantity of asbestos, lead-based paint, and other hazardous materials that may be impacted during any upcoming demolition work. Soil samples were collected to identify subsurface contamination associated with the tank. This report provides a summary of the fieldwork and the analytical results, as well as a discussion of the findings of our investigation.

If you have any questions or need additional information, please contact our office.

Sincerely,

ENVIRONMENTAL CONSULTING GROUP, INC.

Luke Nienhaus
Project Manager

1.0 EXECUTIVE SUMMARY

On March 15, 2011, Environmental Consulting Group, Inc. (ECG) completed an environmental survey of Storage Tank 11E, associated with the P816 Phase V demolition project at Naval Station Great Lakes, in Great Lakes, Illinois. The Appendices at the end of this report contain detailed inspection results, sample locations, and photographs associated with Storage Tank 11E. Figure 1, located in the Appendix A, illustrates the site location and site layout. An overview of the survey findings for Storage Tank 11E is listed below.

Overview of Results

Asbestos Survey Results

One (1) bulk sample of a suspect asbestos-containing material (ACM) was obtained during this inspection. This sample (tan caulk located at the base of the tank) was found to meet the Environmental Protection Agency (EPA) definition of an asbestos-containing material. See the Sample Summary Tables in Appendix B for detailed asbestos results.

Lead Survey Results

A total of two (2) paint chip samples of suspect lead-based paint (LBP) were collected from the exterior wall of the tank during the survey. Neither paint chip sample was found to meet the IDPH definition for lead-based paint. See the Sample Summary Tables in Appendix B for detailed lead results.

Soil Sampling Results

Six soil samples were submitted to a laboratory for analysis of Polynuclear Aromatic Compounds (PNAs), Total Metals, and Total Petroleum Hydrocarbons – Diesel (TPH). ECG compared the soil samples contaminant concentrations to Illinois EPA “Soil Remediation Objectives” (SROs). The comparison showed that 2 of the 6 soil samples has contaminant concentrations above the Tier 1 SROs for industrial/commercial properties.

Miscellaneous Hazardous Materials Identified

No miscellaneous hazardous materials were identified during ECG’s survey of Storage Tank 11E.

2.0 SCOPE-OF-WORK

The scope-of-work for this survey was to determine the presence, location, and quantity of asbestos, lead-based paint, and other hazardous materials that may be impacted by upcoming demolition work. In order to check for potential subsurface contamination associated with Storage Tank 11E, soil samples were collected and analyzed for PNAs, Total Metals, and TPH.

The environmental survey was conducted by ECG representatives Mr. Luke Nienhaus and Mr. Robert Johnson. Mr. Nienhaus is an Illinois Department of Public Health (IDPH)-licensed asbestos building inspector, lead inspector, and lead risk assessor. Mr. Johnson is an IDPH-licensed asbestos building inspector. The sampling and inspection activities were completed on March 15, 2011. ECG certifications are located in Appendix E.

3.0 ASBESTOS TESTING AND RESULTS

3.1 Asbestos Material Testing

One (1) bulk sample of a suspect asbestos-containing material (ACM) was obtained during this inspection. The sample was submitted to EMSL Analytical Inc. (EMSL), located at 2225 W. Hubbard Street, in Chicago, Illinois. EMSL is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP), Laboratory #200399-0. The sample analyzed by the Polarized Light Microscopy (PLM) method. PLM is an Environmental Protection Agency (EPA)-recognized method for determining asbestos content in bulk samples.

3.2 Asbestos Testing Results

The U.S. Environmental Protection Agency (EPA) defines an asbestos containing material (ACM) as any material containing greater than 1% asbestos by weight. **The one sample collected by ECG (tan caulk located at the base of the tank) was found to meet the Environmental Protection Agency (EPA) definition of an asbestos-containing material.**

See the Sample Summary Tables in Appendix B for detailed asbestos results. Laboratory data sheets and certifications are included in Appendix C.

4.0 LEAD TESTING AND RESULTS

4.1 Lead-Based Paint Testing

A total of two (2) paint chip samples of suspect lead-based paint were collected from the exterior wall of the tank during the survey. These samples were submitted to EMSL as well. EMSL is an American Industrial Hygiene Association (AIHA) and Environmental Lead Laboratory Accreditation Program (ELLAP)-accredited laboratory (Lab #102992). The analysis was conducted in accordance with AIHA standards using Flame Atomic Absorption Spectroscopy.

4.2 Lead-Based Paint Testing Results

Lead-based paint is regulated in the State of Illinois by the Illinois Department of Public Health (IDPH) under the Lead Poisoning Prevention Code (effective February 1, 1993). This code states that any paint that is equal to 5,000 parts per million of lead (equivalent to 0.5% lead by weight) is considered to be lead-based. Any paint substance that contains lead at a level equal to or exceeding 5,000 parts per million must be properly handled under the guidelines set by IDPH.

Neither paint chip sample collected by ECG was found to meet the IDPH definition for lead-based paint.

See the Sample Summary Tables in Appendix B for detailed lead results. Laboratory data sheets and certifications are included in Appendix C.

5.0 SOIL SAMPLING ACTIVITIES AND RESULTS

5.1 Soil Sampling Field Activities

On March 15, 2011, ECG oversaw the advancement of two environmental soil borings at the subject property. The purpose of the borings was to investigate the subsurface soils for potential impact associated with the existing above-ground storage tank at the subject property. The soil borings were advanced to depths of approximately 10 feet below grade level (bgl).

5.2 Field Screening

Field screening consisted of measuring each sample with a MiniRae 2000 Micro Tip® photo ionization detector (PID) with a 10.6 eV lamp. The PID quantifies soil-gas hydrocarbon concentrations, which can indicate the presence of benzene, toluene, ethylbenzene, and xylene (BTEX) and volatile organic compounds (VOC) constituents. Upon opening the soil-sampling sleeve, the soil core was slit open, and PID readings measured the concentration of airborne gases present in the headspace of the sleeve. PID readings ranged from 0.0 to 0.2 parts per million (ppm).

During ECG's subsurface investigation, neither of the soil borings exhibited obvious signs (i.e. staining, odors, elevated photo ionization detector (PID) readings, or sheen) of petroleum impact.

5.3 Sample Collection and Laboratory Analysis

In order to ensure that no cross-contamination between samples occurred, all non-dedicated sampling equipment was decontaminated after collection of each sample. Sampling equipment was scrubbed with a brush to remove loose material and then washed thoroughly with a laboratory-grade detergent and distilled water to remove all particulate matter and surface film. After washing, each piece and brush was rinsed with distilled water. Dedicated sampling equipment, such as plastic sampling syringes and latex gloves, was properly disposed of after the handling of each sample was completed.

The soil samples were handled in a manner that minimized potential loss of sample due to volatilization. Three 4-ounce glass jars were filled with soil for analysis of polynuclear aromatic compounds (PNAs), Total Metals (Metals), and total Petroleum Hydrocarbons – Diesel (TPH).

The samples were placed into an ice-filled cooler, maintained at a temperature near 4° Centigrade, and sent to First Environmental Laboratories (First) located in Naperville, Illinois. ECG and First maintain a strict chain of custody (COC) program. The COC program tracks the possession and handling of each sample from the time of collection to analysis by the laboratory. The COC consists of sample identification, analysis, recording format, and signatures.

According to the Illinois Administrative Code (IAC), Title 35, Subtitle A, Chapter II, Part 186, Accreditation of Environmental Laboratories, the State of Illinois formally recognizes that First

is technically competent to perform the environmental analyses. First's IL ELAP/NELAC accreditation number is 100292.

The soil samples were submitted to the laboratory for several analyses. The analyses were conducted in full accordance with “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*” (SW-846) and “*Analytical Quality Assurance Plan for the Illinois Environmental Protection Agency Bureau of Land Site Remediation Program, Revision 2, April 1, 1996.*”

Six (6) soil samples were submitted to a laboratory for analysis of polynuclear aromatic compounds (PNAs), Total Metals (Metals), and Total Petroleum Hydrocarbons – Diesel (TPH). Laboratory data sheets and certifications are included in Appendix C.

5.4 Soil Sampling Results (Comparison to Tier 1 SROs)

ECG compared the soil samples contaminant concentrations to the SROs established by the Illinois EPA. The criteria used by the Illinois EPA are found in the TACO Document, dated February 2007. Since the subject property will continue to be used for industrial/commercial purposes, ECG compared the concentrations to the following Illinois EPA regulations:

- Illinois EPA's Tier 1 SROs for Industrial/Commercial Properties; 35 IAC 742, Appendix B, Table B
- Illinois EPA's Tier 1 SROs for Industrial/Commercial Properties; Non-TACO Chemicals
- Illinois EPA's Tier I SROs for Concentrations of PNAs in Background Soils; 35 IAC 742, Appendix A, Table H.

The comparison showed that 2 of the 6 soil samples have contaminant concentrations above the Tier 1 SROs for industrial/commercial properties.

6.0 CONCLUSIONS

Overview of Results

On March 15, 2011, Environmental Consulting Group, Inc. (ECG) completed an environmental survey of Storage Tank 11E, associated with the P816 Phase V demolition project at Naval Station Great Lakes, in Great Lakes, Illinois. An overview of the survey findings for Storage Tank 11E is listed below.

- One (1) bulk sample of tan caulk (located at the base of the tank) was found to meet the Environmental Protection Agency (EPA) definition of an asbestos-containing material.
- Neither of the two (2) paint chip samples was found to meet the IDPH definition for lead-based paint.
- Six soil samples were submitted to a laboratory for analysis of Polynuclear Aromatic Compounds (PNAs), Total Metals, and Total Petroleum Hydrocarbons – Diesel (TPH). The comparison showed that 2 of the 6 soil samples has contaminant concentrations above the Tier 1 SROs for industrial/commercial properties.
- No miscellaneous hazardous materials were identified during ECG’s survey of Storage Tank 11E.

7.0 QUALIFICATIONS

ECG believes this study was developed in general accordance with the technical standards of practice for environmental assessments at the time the study was conducted. It should be noted, however, that no investigation could eliminate the possibility of hazardous waste and/or environmental contamination at a particular site. However, the standard of care exercised for this study was in accordance with generally accepted practices, and a reasonable effort was made to ensure that the information presented in this report is materially complete and accurate.

Appendices

Appendix A – Figures

Appendix B – Sample Summary Tables

Appendix C – Laboratory Data Sheets and Certifications

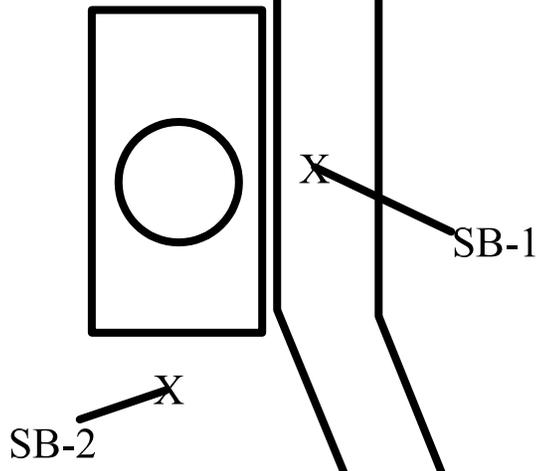
Appendix D – Photographs

Appendix E – ECG Certifications

Appendix F – Boring Logs

Appendix A

Site Figure



LAKE MICHIGAN

ROAD

Soil Sampling Locations Tank 11E Great Lakes Naval Base Great Lakes, Illinois	Date: March 28, 2011	Environmental Consulting Group, Inc. 411 S. Wells St., Suite 700 Chicago, Illinois 60607 Tel: (312) 663-3900 Fax: (312) 663-3930
	Environmental Survey P816 Phase V Aboveground Storage Tank	
ECG Project Number: A111305-104		

Appendix B

Sample Summary Tables

Asbestos Sample Summary Table

P816 Phase V--Storage Tank 11E

Naval Station Great Lakes

Great Lakes, Illinois

Sample ID	Sampled Material Description	Results	Friability	Approximate Quantity square feet (s.f.) linear feet (l.f.)	Functional Area	Condition
1	Caulking—Black/Tan	P	NF	200 lf	Base of above-ground storage tank	Damaged

<p><u>RESULTS</u> P: Positive N: Negative A: Assumed</p>	<p><u>FRIABILITY</u> F: Friable NF: Non-friable Category I NF-II: Non-friable Category II</p>	<p><u>CONDITION</u> Good: Little to no damage Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area</p>
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Lead-Based Paint Testing Results

Results Key		
P=Positive	N=Negative	A=Assumed

HUD Guidelines for Paint Film Quality

Type of building component	Total area of deteriorated paint on each component		
	Intact	Fair	Poor
Exterior components with large surface areas	Entire surface is intact	Less than or equal to 10 ft ²	More than 10 ft ²
Interior components with large surface areas (walls, ceilings, floors, doors)	Entire surface is intact	Less than or equal to 2 ft ²	More than 2 ft ²
Interior and exterior components with small surface areas (window sills, baseboards, soffits, and trim)	Entire surface is intact	Less than or equal to 10% of the total surface area of the component	More than 10% of the total surface of the component

Lead-Based Paint Sample Summary Table

P816 Phase V--Storage Tank 11E

Naval Station Great Lakes

Great Lakes, Illinois

Sample ID	Substrate Sampled	Functional Area	Results	Paint Color	Approximate Quantity square feet (s.f.)	Condition
11E-Pb-1	Wall	Exterior wall of the tank	N	White	—	Intact
11E-Pb-2	Wall	Exterior wall of the tank	N	White	—	Intact

Soil Sample Summary Table Great Lakes Naval Base - Storage Tank 11E

Project Number: A111305-104

Table 1. PNAs

Chemical Name		Exposure Route-Specific SROs*				Soil Component of GW Ingestion Route*		Background Levels**	Sample Numbers					
		Industrial/Commercial		Construction Worker		Class I	Class II		SB1-11E 3'	SB1-11E 6'	SB1-11E 9'	SB2-11E 3'	SB2-11E 6'	SB2-11E 9'
		Ingestion	Inhalation	Ingestion	Inhalation			Date Sampled						
PNAs														
Acenaphthene	b	120,000	NRO	120,000	NRO	570	2,900	0.13	0.126	<0.050	<0.050	0.428	<0.050	<0.050
Acenaphthylene		61,000	NRO	4,100	1,300	24	120	0.07	0.229	<0.050	<0.050	1.31	<0.050	<0.050
Anthracene		610,000	NRO	610,000	NRO	12,000	59,000	0.4	1.16	<0.050	<0.050	2.06	<0.050	<0.050
Benzo(a)anthracene	a	8	NRO	170	NRO	2	8	1.8	2.18	0.0468	0.0254	2.79	0.0397	0.0899
Benzo(a)pyrene	a	0.8	NRO	17	NRO	8	82	2.1	1.8	0.042	0.024	2.37	0.029	0.07
Benzo(b)fluoranthene	a	8	NRO	170	NRO	5	25	2.1	1.83	0.036	0.022	2.07	0.026	0.056
Benzo(k)fluoranthene	a	78	NRO	1,700	NRO	49	250	1.7	1.03	0.035	0.018	1.63	0.024	0.049
Benzo(g,h,i)perylene		61,000	NRO	61,000	NRO	32,000	160,000	1.7	1.11	<0.050	<0.050	1.43	<0.050	<0.050
Chrysene	a	780	NRO	17,000	NRO	160	800	2.7	1.94	0.053	<0.050	2.85	<0.050	0.094
Dibenzo(a,h)anthracene	a	0.8	NRO	17	NRO	2	7.6	0.42	0.326	<0.020	<0.020	0.428	<0.020	<0.020
Fluoranthene	b	82,000	NRO	82,000	NRO	4,300	21,000	4.1	5.63	0.101	0.055	8.0	0.076	0.165
Fluorene	b	82,000	NRO	82,000	NRO	560	2,800	0.18	0.344	<0.050	<0.050	1.82	<0.050	<0.050
Indeno(1,2,3-cd)pyrene	a	8	NRO	170	NRO	14	69	1.6	1.29	0.032	<0.029	1.69	<0.029	0.046
Naphthalene	b	41,000	270	4,100	1.8	12	18	0.2	0.048	<0.025	<0.025	1.37	<0.025	<0.025
Phenanthrene		61,000	NRO	61,000	NRO	220	1,100	2.5	3.18	0.056	<0.050	8.97	<0.050	0.071
Pyrene	b	61,000	NRO	61,000	NRO	4,200	21,000	3.0	3.67	0.094	0.057	5.98	0.076	0.162

* Illinois EPA Tier 1 Soil Remediation Objectives (SROs) for Industrial/Commercial Properties; 35 IAC 742, Appendix B, Table B

^ Soil Saturation Limits for Chemicals Whose Melting Point is Less Than 30°C; 35 IAC 742, Appendix A, Table A

** Concentrations of PNAs in Background Soils for Metropolitan Areas; 35 IAC 742, Appendix A, Table H

All results in parts per million (mg/Kg) unless noted otherwise

NBL = No Background Level

a = Carcinogenic b = Noncarcinogenic

NRO = No Remediation Objective

NSSL = No Soil Saturation Limit

Results in **Bold/Shaded** indicate concentrations exceeding the Site Specific Tier 1 SROs

Appendix C

Laboratory Data Sheets and Certifications



EMSL Analytical, Inc.

2225 W. Hubbard Street, Chicago, IL 60612

Phone: (773) 313-0099 Fax: (773) 313-0139 Email: chicagolab@emsl.com

Attn: **Luke Nienhaus**
Environmental Consulting Group
411 S. Wells St., Suite 700
Chicago, IL 60607

Customer ID: ENCG51
Customer PO: 047617
Received: 03/21/11 10:40 AM
EMSL Order: 261101584

Fax: (312) 663-3930 Phone: (312) 663-3900

EMSL Proj:
Analysis Date: 3/22/2011

Project: **Great Lakes Naval Phase 5 Building 11E**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01 261101584-0001	caulking - black / tan base of agst	Tan/Black Non-Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile

Initial report from 03/22/2011 11:53:19

Analyst(s)

Alice Hillegass (1)

Andrei Poluchowicz,
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Chicago, IL NVLAP Lab Code 200399-0, TX 300289



EMSL Analytical, Inc.
 2001 East 52nd St., Indianapolis, IN 46205

Phone: (317) 803-2997 Fax: (317) 803-3047 Email: indianapolislaboratory@emsl.com

Attn: **Luke Nienhaus**
Environmental Consulting Group
411 S. Wells St., Suite 700
Chicago, IL 60607

Customer ID: ENCG51
 Customer PO: 038817
 Received: 03/21/11 10:30 AM
 EMSL Order: 161104351

Fax: (312) 663-3930 Phone: (312) 663-3900
 Project: **Great Lakes Naval Phase 5**

EMSL Proj:

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	RDL	Lead Concentration	Notes
0001	3/24/2011	100 ppm	100 ppm	
Client Sample 11E-Pb1				Collected: 3/15/2011
0002	3/24/2011	100 ppm	310 ppm	
Client Sample 11E-Pb2				Collected: 3/15/2011

Initial report from 03/24/2011 10:11:08

Doug Wiegand, Laboratory Manager
 or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN AIHA-LAP, LLC--ELLAP 157245, OH E10040



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

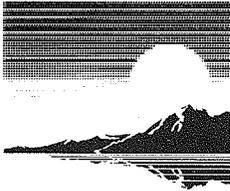
Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

161104351

EMSL ANALYTICAL, INC.
2444 WEST GEORGE ST.
CHICAGO, IL 60618
PHONE: 773-313-0099
FAX:

Company: <i>Environmental Consulting Group, Inc.</i>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>		
Street: <i>411 S. Wells #700</i>		<small>Third Party Billing requires written authorization from third party</small>		
City: <i>Chicago</i>	State/Province: <i>IL</i>	Zip/Postal Code: <i>60607</i>	Country: <i>U.S.</i>	
Report To (Name): <i>Luke Nienhaus</i>		Fax #:		
Telephone #: <i>312 663-3900</i>		Email Address: <i>lnienhaus@envcg.com</i>		
Project Name/Number: <i>Great Lakes Naval - Phase 5</i>		EMSL Rep: <i>Lisa Parker</i>		
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken: <i>IL</i>	
Turnaround Time (TAT) Options* - Please Check				
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input checked="" type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week	
<small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide</small>				
Matrix	Method	Instrument	Reporting Limit	Check
Chips <input type="checkbox"/> mg/cm ² <input checked="" type="checkbox"/> % by wt.	SW846-7000B/7420 or AOAC 974.02	Flame Atomic Absorption	0.01%	<input checked="" type="checkbox"/>
	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
Air	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300 modified	ICP-AES	0.5 µg/filter	<input type="checkbox"/>
	SW846-7000B/7420	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
Wipe* <input type="checkbox"/> ASTM <input type="checkbox"/> non ASTM <small>*if no box is checked, non-ASTM Wipe is assumed</small>	SW846-6010B or C	ICP-AES	0.5 µg/wipe	<input type="checkbox"/>
	SW846-1311/7420/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
TCLP	SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	<input type="checkbox"/>
	SW846-7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
Soil	SW846-7421	Graphite Furnace AA	0.3 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)	<input type="checkbox"/>
	SM3111B or SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
Wastewater	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
Drinking Water				
Other:		Preservation Method (Water):		
Name of Sampler: <i>Luke Ni</i>		Signature of Sampler: <i>Luke Nienhaus</i>		
Sample #	Location	Volume/Area	Date/Time Sampled	
<i>11E-Pb1</i>	<i>Tank 11E - Exterior</i>	<i>1 in²</i>	<i>3/15/11</i>	
<i>11E-Pb2</i>	<i>Tank 11E - Exterior wall</i>	<i>1 in²</i>		
Client Sample #'s: <i>Pb1 - Pb2</i>		Total # of Samples:	<i>2</i>	
Relinquished (Client): <i>Luke Ni</i>	Date: <i>3/21/11</i>	Time: <i>10:30A</i>		
Received (Lab): <i>[Signature]</i>	Date: <i>3-21-11</i>	Time: <i>10:30Walstein</i>		
Comments: <i>Recd. W. Simmons 3/22/11 9:55FX</i>				
<i>Rel to undy 3-21-11 15:00fx</i>				



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

March 23, 2011

Mr. Robert Johnson
ENVIRONMENTAL CONSULTING GROUP
411 South Wells Street
Suite 700
Chicago, IL 60607

Project ID: Great Lakes 11E
First Environmental File ID: 11-1007
Date Received: March 16, 2011

Dear Mr. Robert Johnson:

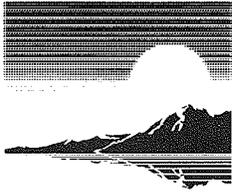
The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 002687: effective 03/01/2011 through 02/28/2012.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Bill Mottashed
Project Manager



Case Narrative

ENVIRONMENTAL CONSULTING GROUP

Project ID: **Great Lakes 11E**

First Environmental File ID: **11-1007**

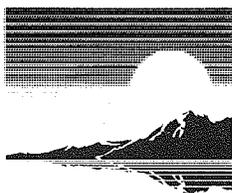
Date Received: **March 16, 2011**

Flag	Description	Flag	Description
<	Analyte not detected at or above the reporting limit.	L+	LCS recovery outside control limits; high bias.
B	Analyte detected in associated method blank.	L-	LCS recovery outside control limits; low bias.
C	Identification confirmed by GC/MS.	M	MS recovery outside control limits; LCS acceptable.
D	Surrogates diluted out; recovery not available.	M+	MS recovery outside control limits high bias; LCS acceptable.
E	Estimated result; concentration exceeds calibration range.	M-	MS recovery outside control limits low bias; LCS acceptable.
F	Field measurement.	N	Analyte is not part of our NELAC accreditation.
		ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.
G	Surrogate recovery outside control limits; matrix effect.	P	Chemical preservation pH adjusted in lab.
H	Analysis or extraction holding time exceeded.	Q	The analyte was determined by a GC/MS database search.
J	Estimated result; concentration is less than calib range.	S	Analyte was sub-contracted to another laboratory for analysis.
K	RPD outside control limits.	T	Sample temperature upon receipt exceeded 0-6°C
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	W	Reporting limit elevated due to sample matrix.

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

Sample Batch Comments:

Sample acceptance criteria were met.



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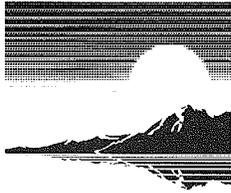
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB1-11E 3'
Sample No: 11-1007-001

Date Collected: 03/15/11
Time Collected: 8:00
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, total		Method: 2540B		
Analysis Date: 03/17/11				
Total Solids	87.25		%	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		Preparation Method 3540C
Analysis Date: 03/18/11				
Preparation Date: 03/17/11				
Acenaphthene	126	50	ug/kg	
Acenaphthylene	229	50	ug/kg	
Anthracene	1,160	50	ug/kg	
Benzo(a)anthracene	2,180	8.7	ug/kg	
Benzo(a)pyrene	1,800	15	ug/kg	
Benzo(b)fluoranthene	1,830	11	ug/kg	
Benzo(k)fluoranthene	1,030	11	ug/kg	
Benzo(ghi)perylene	1,110	50	ug/kg	
Chrysene	1,940	50	ug/kg	
Dibenzo(a,h)anthracene	326	20	ug/kg	
Fluoranthene	5,630	50	ug/kg	
Fluorene	344	50	ug/kg	
Indeno(1,2,3-cd)pyrene	1,290	29	ug/kg	
Naphthalene	48	25	ug/kg	
Phenanthrene	3,180	50	ug/kg	
Pyrene	3,670	50	ug/kg	
Total Metals		Method: 6010B		Preparation Method 3050B
Analysis Date: 03/18/11				
Preparation Date: 03/17/11				
Aluminum	2,420	5.0	mg/kg	
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.7	0.2	mg/kg	
Barium	14.2	0.1	mg/kg	
Beryllium	0.2	0.1	mg/kg	
Cadmium	0.7	0.1	mg/kg	
Calcium	50,000	10	mg/kg	
Chromium	8.7	0.1	mg/kg	
Cobalt	3.4	0.1	mg/kg	
Copper	27.6	0.1	mg/kg	
Iron	11,700	1.0	mg/kg	
Lead	26.8	0.2	mg/kg	
Magnesium	24,300	10	mg/kg	
Manganese	291	0.1	mg/kg	



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Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB1-11E 3'
Sample No: 11-1007-001

Date Collected: 03/15/11
Time Collected: 8:00
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 03/18/11		Method: 6010B	Preparation Method 3050B Preparation Date: 03/17/11	
Nickel	7.4	0.1	mg/kg	
Potassium	642	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	413	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	14.9	1.0	mg/kg	
Zinc	120	0.5	mg/kg	
Total Metals Analysis Date: 03/17/11		Method: 7470A		
Mercury	0.07	0.05	mg/kg	
Cyanide, Total Analysis Date: 03/22/11		Method: 4500CN,C,E		
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH Analysis Date: 03/23/11		Method: 8015B	Preparation Method CALIF Preparation Date: 03/21/11	
TPH as Diesel	41	10	mg/kg	
pH @ 25°C, 1:10 Analysis Date: 03/17/11 14:00		Method: 4500H+,B		
pH @ 25°C, 1:10	10.50		Units	



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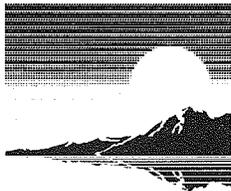
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB1-11E 6'
Sample No: 11-1007-002

Date Collected: 03/15/11
Time Collected: 8:00
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Analysis Date: 03/18/11		Method: 6010B	Preparation Method 3050B	
Preparation Date: 03/17/11				
Nickel	5.4	0.1	mg/kg	
Potassium	435	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	275	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	16.0	1.0	mg/kg	
Zinc	87.7	0.5	mg/kg	
Total Metals				
Analysis Date: 03/17/11		Method: 7470A		
Mercury	< 0.05	0.05	mg/kg	
Cyanide, Total				
Analysis Date: 03/22/11		Method: 4500CN,C,E		
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH				
Analysis Date: 03/23/11		Method: 8015B	Preparation Method CALIF	
Preparation Date: 03/21/11				
TPH as Diesel	< 10	10	mg/kg	
pH @ 25°C, 1:10				
Analysis Date: 03/17/11 14:00		Method: 4500H+,B		
pH @ 25°C, 1:10	10.06		Units	



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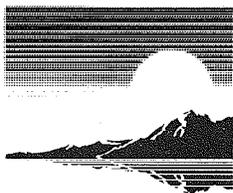
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB1-11E 9'
Sample No: 11-1007-003

Date Collected: 03/15/11
Time Collected: 8:00
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, total		Method: 2540B		
Analysis Date: 03/17/11				
Total Solids	87.44		%	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		Preparation Method 3540C
Analysis Date: 03/18/11		Preparation Date: 03/17/11		
Acenaphthene	< 50	50	ug/kg	
Acenaphthylene	< 50	50	ug/kg	
Anthracene	< 50	50	ug/kg	
Benzo(a)anthracene	25.4	8.7	ug/kg	
Benzo(a)pyrene	24	15	ug/kg	
Benzo(b)fluoranthene	22	11	ug/kg	
Benzo(k)fluoranthene	18	11	ug/kg	
Benzo(ghi)perylene	< 50	50	ug/kg	
Chrysene	< 50	50	ug/kg	
Dibenzo(a,h)anthracene	< 20	20	ug/kg	
Fluoranthene	55	50	ug/kg	
Fluorene	< 50	50	ug/kg	
Indeno(1,2,3-cd)pyrene	< 29	29	ug/kg	
Naphthalene	< 25	25	ug/kg	
Phenanthrene	< 50	50	ug/kg	
Pyrene	57	50	ug/kg	
Total Metals		Method: 6010B		Preparation Method 3050B
Analysis Date: 03/18/11		Preparation Date: 03/17/11		
Aluminum	3,120	5.0	mg/kg	
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.3	0.2	mg/kg	
Barium	18.8	0.1	mg/kg	
Beryllium	0.3	0.1	mg/kg	
Cadmium	1.1	0.1	mg/kg	
Calcium	73,300	10	mg/kg	
Chromium	15.0	0.1	mg/kg	
Cobalt	4.5	0.1	mg/kg	
Copper	71.7	0.1	mg/kg	
Iron	14,400	1.0	mg/kg	
Lead	46.0	0.2	mg/kg	
Magnesium	33,200	10	mg/kg	
Manganese	337	0.1	mg/kg	



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Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP

Date Collected: 03/15/11

Project ID: Great Lakes 11E

Time Collected: 8:00

Sample ID: SB1-11E 9'

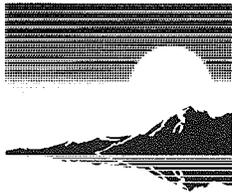
Date Received: 03/16/11

Sample No: 11-1007-003

Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 03/18/11	Method: 6010B	Preparation Method 3050B Preparation Date: 03/17/11		
Nickel	10.5	0.1	mg/kg	
Potassium	949	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	309	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	12.6	1.0	mg/kg	
Zinc	13.8	0.5	mg/kg	
Total Metals Analysis Date: 03/17/11	Method: 7470A			
Mercury	< 0.05	0.05	mg/kg	
Cyanide, Total Analysis Date: 03/22/11	Method: 4500CN,C,E			
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH Analysis Date: 03/23/11	Method: 8015B	Preparation Method CALIF Preparation Date: 03/21/11		
TPH as Diesel	< 10	10	mg/kg	
pH @ 25°C, 1:10 Analysis Date: 03/17/11 14:00	Method: 4500H+,B			
pH @ 25°C, 1:10	9.46		Units	



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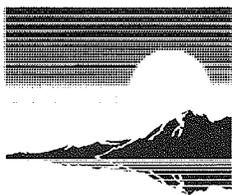
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 3'
Sample No: 11-1007-004

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, total Method: 2540B				
Analysis Date: 03/17/11				
Total Solids	86.96		%	
Polynuclear Aromatic Hydrocarbons Method: 8270C				
Analysis Date: 03/18/11				
Preparation Method 3540C				
Preparation Date: 03/17/11				
Acenaphthene	428	50	ug/kg	
Acenaphthylene	1,310	50	ug/kg	
Anthracene	2,060	50	ug/kg	
Benzo(a)anthracene	2,790	8.7	ug/kg	
Benzo(a)pyrene	2,370	15	ug/kg	
Benzo(b)fluoranthene	2,070	11	ug/kg	
Benzo(k)fluoranthene	1,630	11	ug/kg	
Benzo(ghi)perylene	1,430	50	ug/kg	
Chrysene	2,850	50	ug/kg	
Dibenzo(a,h)anthracene	428	20	ug/kg	
Fluoranthene	8,000	50	ug/kg	
Fluorene	1,820	50	ug/kg	
Indeno(1,2,3-cd)pyrene	1,690	29	ug/kg	
Naphthalene	1,370	25	ug/kg	
Phenanthrene	8,970	50	ug/kg	
Pyrene	5,980	50	ug/kg	
Total Metals Method: 6010B				
Analysis Date: 03/18/11				
Preparation Method 3050B				
Preparation Date: 03/17/11				
Aluminum	1,630	5.0	mg/kg	
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.8	0.2	mg/kg	
Barium	11.5	0.1	mg/kg	
Beryllium	0.2	0.1	mg/kg	
Cadmium	0.5	0.1	mg/kg	
Calcium	41,100	10	mg/kg	
Chromium	8.9	0.1	mg/kg	
Cobalt	2.6	0.1	mg/kg	
Copper	29.7	0.1	mg/kg	
Iron	11,200	1.0	mg/kg	
Lead	24.4	0.2	mg/kg	
Magnesium	20,100	10	mg/kg	
Manganese	221	0.1	mg/kg	



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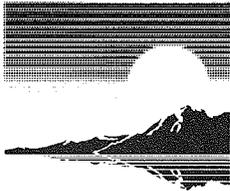
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 3'
Sample No: 11-1007-004

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 03/18/11	Method: 6010B	Preparation Method 3050B Preparation Date: 03/17/11		
Nickel	5.4	0.1	mg/kg	
Potassium	379	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	218	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	13.8	1.0	mg/kg	
Zinc	90.4	0.5	mg/kg	
Total Metals Analysis Date: 03/18/11	Method: 7470A			
Mercury	0.14	0.05	mg/kg	
Cyanide, Total Analysis Date: 03/22/11	Method: 4500CN,C,E			
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH Analysis Date: 03/23/11	Method: 8015B	Preparation Method CALIF Preparation Date: 03/21/11		
TPH as Diesel	64	10	mg/kg	
pH @ 25°C, 1:10 Analysis Date: 03/17/11 14:00	Method: 4500H+,B			
pH @ 25°C, 1:10	9.06		Units	



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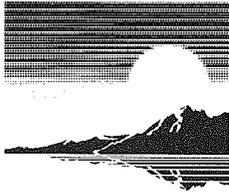
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 6'
Sample No: 11-1007-005

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, total				
Analysis Date: 03/17/11		Method: 2540B		
Total Solids	87.02		%	
Polynuclear Aromatic Hydrocarbons				
Analysis Date: 03/18/11		Method: 8270C		
		Preparation Method 3540C		
		Preparation Date: 03/17/11		
Acenaphthene	< 50	50	ug/kg	
Acenaphthylene	< 50	50	ug/kg	
Anthracene	< 50	50	ug/kg	
Benzo(a)anthracene	39.7	8.7	ug/kg	
Benzo(a)pyrene	29	15	ug/kg	
Benzo(b)fluoranthene	26	11	ug/kg	
Benzo(k)fluoranthene	24	11	ug/kg	
Benzo(ghi)perylene	< 50	50	ug/kg	
Chrysene	< 50	50	ug/kg	
Dibenzo(a,h)anthracene	< 20	20	ug/kg	
Fluoranthene	76	50	ug/kg	
Fluorene	< 50	50	ug/kg	
Indeno(1,2,3-cd)pyrene	< 29	29	ug/kg	
Naphthalene	< 25	25	ug/kg	
Phenanthrene	< 50	50	ug/kg	
Pyrene	76	50	ug/kg	
Total Metals				
Analysis Date: 03/18/11		Method: 6010B		
		Preparation Method 3050B		
		Preparation Date: 03/17/11		
Aluminum	2,010	5.0	mg/kg	
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.9	0.2	mg/kg	
Barium	8.3	0.1	mg/kg	
Beryllium	0.2	0.1	mg/kg	
Cadmium	0.2	0.1	mg/kg	
Calcium	51,400	10	mg/kg	
Chromium	4.3	0.1	mg/kg	
Cobalt	3.0	0.1	mg/kg	
Copper	5.7	0.1	mg/kg	
Iron	5,710	1.0	mg/kg	
Lead	148	0.2	mg/kg	
Magnesium	24,000	10	mg/kg	
Manganese	226	0.1	mg/kg	



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Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 6'
Sample No: 11-1007-005

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010B	Preparation Method 3050B	
Analysis Date: 03/18/11		Preparation Date: 03/17/11		
Nickel	5.4	0.1	mg/kg	
Potassium	598	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	253	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	8.0	1.0	mg/kg	
Zinc	40.4	0.5	mg/kg	
Total Metals		Method: 7470A		
Analysis Date: 03/17/11				
Mercury	< 0.05	0.05	mg/kg	
Cyanide, Total		Method: 4500CN,C,E		
Analysis Date: 03/22/11				
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH		Method: 8015B	Preparation Method CALIF	
Analysis Date: 03/23/11		Preparation Date: 03/21/11		
TPH as Diesel	15	10	mg/kg	
pH @ 25°C, 1:10		Method: 4500H+,B		
Analysis Date: 03/17/11 14:00				
pH @ 25°C, 1:10	9.05		Units	



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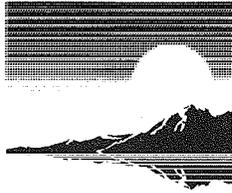
Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 9'
Sample No: 11-1007-006

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, total Method: 2540B				
Analysis Date: 03/17/11				
Total Solids	85.98		%	
Polynuclear Aromatic Hydrocarbons Method: 8270C				
Analysis Date: 03/18/11 Preparation Method 3540C				
Preparation Date: 03/17/11				
Acenaphthene	< 50	50	ug/kg	
Acenaphthylene	< 50	50	ug/kg	
Anthracene	< 50	50	ug/kg	
Benzo(a)anthracene	89.9	8.7	ug/kg	
Benzo(a)pyrene	70	15	ug/kg	
Benzo(b)fluoranthene	56	11	ug/kg	
Benzo(k)fluoranthene	49	11	ug/kg	
Benzo(ghi)perylene	< 50	50	ug/kg	
Chrysene	94	50	ug/kg	
Dibenzo(a,h)anthracene	< 20	20	ug/kg	
Fluoranthene	165	50	ug/kg	
Fluorene	< 50	50	ug/kg	
Indeno(1,2,3-cd)pyrene	46	29	ug/kg	
Naphthalene	< 25	25	ug/kg	
Phenanthrene	71	50	ug/kg	
Pyrene	162	50	ug/kg	
Total Metals Method: 6010B				
Analysis Date: 03/18/11 Preparation Method 3050B				
Preparation Date: 03/17/11				
Aluminum	1,830	5.0	mg/kg	
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.4	0.2	mg/kg	
Barium	18.4	0.1	mg/kg	
Beryllium	0.2	0.1	mg/kg	
Cadmium	0.5	0.1	mg/kg	
Calcium	46,300	10	mg/kg	
Chromium	8.1	0.1	mg/kg	
Cobalt	2.7	0.1	mg/kg	
Copper	28.0	0.1	mg/kg	
Iron	11,100	1.0	mg/kg	
Lead	26.6	0.2	mg/kg	
Magnesium	22,900	10	mg/kg	
Manganese	254	0.1	mg/kg	



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Analytical Report

Client: ENVIRONMENTAL CONSULTING GROUP
Project ID: Great Lakes 11E
Sample ID: SB2-11E 9'
Sample No: 11-1007-006

Date Collected: 03/15/11
Time Collected: 8:40
Date Received: 03/16/11
Date Reported: 03/23/11

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 03/18/11	Method: 6010B	Preparation Method 3050B Preparation Date: 03/17/11		
Nickel	5.7	0.1	mg/kg	
Potassium	477	10	mg/kg	
Selenium	< 0.2	0.2	mg/kg	
Silver	< 0.1	0.1	mg/kg	
Sodium	268	10	mg/kg	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	14.0	1.0	mg/kg	
Zinc	87.7	0.5	mg/kg	
Total Metals Analysis Date: 03/17/11	Method: 7470A			
Mercury	< 0.05	0.05	mg/kg	
Cyanide, Total Analysis Date: 03/22/11	Method: 4500CN,C,E			
Cyanide, Total	< 0.10	0.10	mg/kg	
TPH Analysis Date: 03/23/11	Method: 8015B	Preparation Method CALIF Preparation Date: 03/21/11		
TPH as Diesel	< 10	10	mg/kg	
pH @ 25°C, 1:10 Analysis Date: 03/17/11 14:00	Method: 4500H+,B			
pH @ 25°C, 1:10	9.25		Units	



**First
Environmental
Laboratories, Inc.**

CHAIN OF CUSTODY RECORD

First Environmental Laboratories
1600 Shore Road, Suite D
Naperville, Illinois 60563
Phone: (630) 778-1200 • Fax: (630) 778-1233
E-mail: firstinfo@firstenv.com
IEPA Certification #100292

Company Name: ELC
Street Address: 411 S. Wells Suite 700
City: Chicago State: IL Zip: 60607
Phone: _____ Fax: _____ e-mail: _____
Send Report To: RA Johnson Via: Fax e-mail
Sampled By: RA Johnson

Analyses

Project I.D.: GREAT LAKES - 11E
P.O. #: GREAT LAKES - 11E

Matrix Codes: S = Soil W = Water O = Other

Date/Time Taken	Sample Description	Matrix	Analyses					Comments	Lab I.D.
			PNA	PAL Metals	TPH-DPO	PH			
3/15/11 0800	SB1 - 11E 3'	S	X	X	X	X		11-1007-001	
3/15/11 0800	SB1 - 11E 6'	S	X	X	X	X		002	
3/15/11 0800	SB1 - 11E 9'	S	X	X	X	X		003	
3/15/11 0840	SB2 - 11E 3'	S	X	X	X	X		004	
3/15/11 0840	SB2 - 11E 6'	S	X	X	X	X		005	
3/15/11 0840	SB2 - 11E 9'	S	X	X	X	X		006	

FOR LAB USE ONLY:

Cooler Temperature: 0.1-6°C Yes No _____ °C
 Received within 6 hrs. of collection: _____
 Ice Present: Yes No _____
 Sample Refrigerated: Yes No _____
 Refrigerator Temperature: _____ °C
 5035 Vials Frozen: Yes No _____
 Freezer Temperature: _____ °C
 Containers Received Preserved: Yes No
 Need to meet: IL TACO IN. RISC

Notes and Special Instructions: _____

Relinquished By: [Signature] Date/Time 3/16/11 1100 Received By: [Signature] Date/Time 3/16/11 1100
 Relinquished By: _____ Date/Time _____ Received By: _____ Date/Time _____

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200399-0

EMSL Analytical Inc.
Chicago, IL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

BULK ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2010-04-01 through 2011-03-31

Effective dates



Sally S. Bruce
For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical Inc.
 2444 West George St.
 Chicago, IL 60618
 Ms. Nancy McDonald
 Phone: 773-313-0099 Fax: 773-313-0139
 E-Mail: nmcdonald@emsl.com
 URL: http://www.emsl.com

BULK ASBESTOS FIBER ANALYSIS (PLM)

NVLAP LAB CODE 200399-0

NVLAP Code Designation / Description

18/A01 EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2010-04-01 through 2011-03-31

Effective dates

Sally S. Bruce

For the National Institute of Standards and Technology



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

2444 West George Street, Chicago, IL 60618

Laboratory ID: 102992

has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC thereby conforming to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories*. The above named laboratory, along with all premises from which key activities are performed, as listed above, have been accredited by AIHA-LAP, LLC in the following:

LABORATORY ACCREDITATION PROGRAMS

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: |
| <input checked="" type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: 09/01/2012 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: 09/01/2012 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current scope of accreditation.

Dave Sandusky, CIH
Chairperson, Analytical Accreditation Board

Date Issued: 09/01/2010



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.
2444 West George Street, Chicago, IL 60618

Laboratory ID: 102992
Issue Date: 09/01/2010

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

Environmental Microbiology Laboratory Accreditation Program (EMLAP)

Initial Accreditation Date: 12/01/2004

EMLAP Category	Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Fungal	Air - Direct Examination	05-TP-003.4	In-house: Analysis of Airborne Fungal Spores, Hyphal Fragments, Pollen, Insect Fragments, and Fibrous Particulate by Optical Microscopy of Spore Trap Samples
	Bulk - Direct Examination	M041	Standard Operating Procedure for the Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, Pollen, Insect Fragments, and Fibrous Material from Surface Samples
	Surface - Direct Examination	M041	Standard Operating Procedure for the Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, Pollen, Insect Fragments, and Fibrous Material from Surface Samples

The laboratory participates in the following AIHA-LAP, LLC-approved proficiency testing programs:

- √ Fungal Culturable
- √ Bacterial Culturable
- √ Fungal Direct Examination



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
NELAP - RECOGNIZED



ENVIRONMENTAL LABORATORY ACCREDITATION

is hereby granted to

FIRST ENVIRONMENTAL LABORATORIES, INC.

1600 SHORE ROAD, SUITE D

NAPERVILLE, IL 60563

NELAP ACCREDITED

ACCREDITATION NUMBER #100292



According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Gary Germann
 Manager
 Environmental Laboratory Accreditation Program

Scott D. Siders
 Accreditation Officer
 Environmental Laboratory Accreditation Program

Certificate No.: 002687
 Expiration Date: 02/28/2012
 Issued On: 03/01/2011

Appendix D
Site Photographs



1. View of above-ground storage tank 11E.



2. View of area where soil samples were taken.



3. View of base caulking—Asbestos.

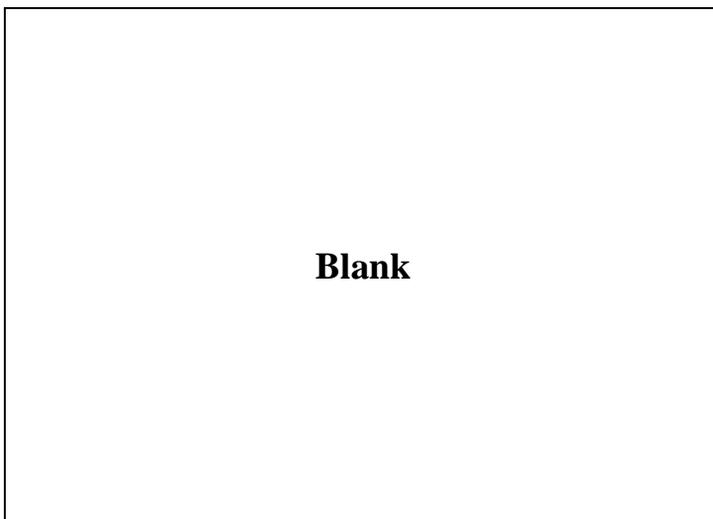
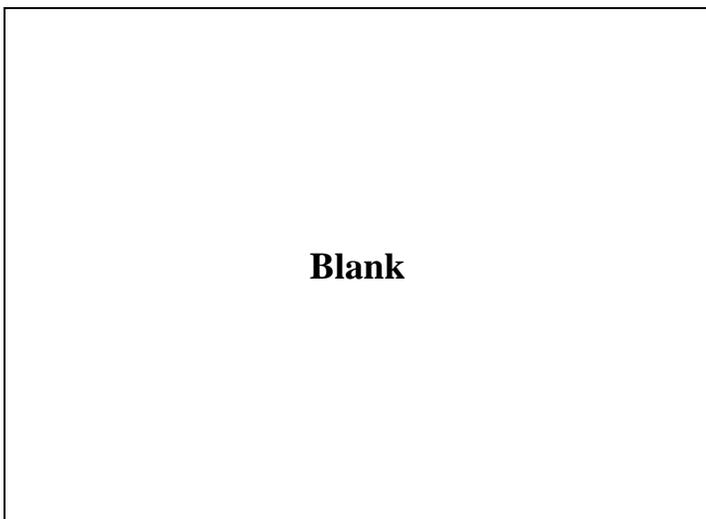
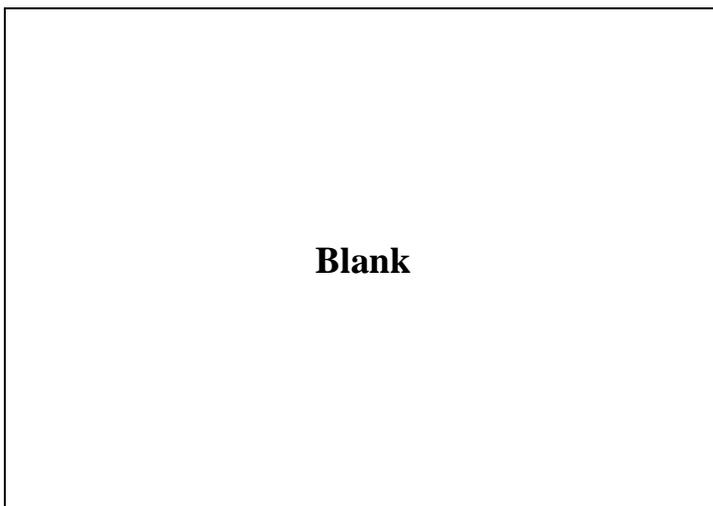


PHOTO DOCUMENTATION

Project: P816 Phase V--Tank 11E

Location: Naval Station Great Lakes, Great Lakes, IL



Naval Station Great Lakes

Tank 11E Photographs

Project No: A111305-104

Appendix E

ECG Certifications



american board of industrial hygiene®

organized to improve the practice of industrial hygiene
proclaims that

Kenneth R. Reinebach

having met all requirements through
education, experience and examination,
is hereby certified in the

**COMPREHENSIVE PRACTICE
of
INDUSTRIAL HYGIENE**

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH

Certificate Number: 5409 CP

Awarded: December 9, 1991

Expiration Date: June 1, 2013

A handwritten signature in black ink, appearing to read 'Sean E. Merkle', written over a horizontal line.

Chair ABIH

A handwritten signature in black ink, appearing to read 'Lynn C. O'Connell', written over a horizontal line.

Executive Director ABIH

 State of Illinois
Environmental Protection Agency 

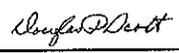
License Number: 00227 Expiration Date: May 16, 2010

Kenneth R. Reinebach

has complied with the provisions of the Illinois Industrial Hygienists Licensure Act and/or rules and regulations and is hereby authorized to use the title of

LICENSED INDUSTRIAL HYGIENIST

May 16, 2008 _____
Date



Douglas P. Scott, Director

 State of Illinois
Environmental Protection Agency 

License Number: 00227 Expiration Date: May 16, 2010

Kenneth R. Reinebach

has complied with the provisions of the Illinois Industrial Hygienists Licensure Act and/or rules and regulations and is hereby authorized to use the title of

LICENSED INDUSTRIAL HYGIENIST

May 16, 2008 _____
Date



Douglas P. Scott, Director



Kenneth R. Reinebach



**ASBESTOS
PROFESSIONAL
LICENSE**

ID NUMBER

100 - 11369

ISSUED

8/23/2010

EXPIRES

05/15/2011

LUKE C NIENHAUS
3717 N. KENMORE AVE #3
CHICAGO, IL 60613

Environmental Health



ENDORSEMENTS

TC EXPIRES

INSPECTOR

3/24/2011

AIR SAMPLING PROFESSIONAL

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois
Department of Public Health
This license is valid only when accompanied by a valid
training course certificate.



Occupational Training & Supply, Inc.

7233 Adams Street ♦ Willowbrook, IL 60527 ♦ (630) 655-3900

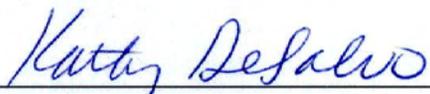
Luke Nienhaus

has successfully completed the 4 hour Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health and the Indiana Department of Environmental Management for purposes of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency Response Act (AHERA) and TSCA Title II.

Asbestos Building Inspector Refresher

Course Date: 3/24/2010
Expiration Date: 3/24/2011

Exam Date: 3/24/2010
Certificate: BIR1003240910


Kathy DeSalvo, Director

2010



Alteration of this license shall result in legal action
RISK ASSESSOR CERTIFICATE EXPIRES
10/6/2013

This license issued under authority of the State
of Illinois -Department of Public Health

This license is valid only when accompanied by
a valid training course certificate

If found return to 525 W. Jefferson St Springfield, IL 62761



**ASBESTOS
PROFESSIONAL
LICENSE**

ID NUMBER
100 - 10834

ISSUED
1/26/2011

EXPIRES
05/15/2012

ROBERT A JOHNSON
5244 W MADISON STREET
SKOKIE, IL 60077

Environmental Health



ENDORSEMENTS

TC EXPIRES

INSPECTOR

8/31/2011

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois
Department of Public Health
This license is valid only when accompanied by a valid
training course certificate.



This is to Certify that
Robert Johnson
Has Satisfactorily Completed Training in Accordance
with Applicable Rules and Regulations
Hazardous Material Refresher

Completed: 2/26/2010 Certificate
Expires: 2/26/2011 HMR1002260537

2010

Occupational Training & Supply, Inc.
7233 Adams Street • Willowbrook, IL 60527 • (630) 655-3900

Class Date: 2/26/2010
Hazardous Material Refresher



Appendix F

Boring Logs



Environmental Consulting Group, Inc.
 411 S. Wells Street, Suite 700
 Chicago, Illinois 60607
 (312) 663-3900

LOG OF SOIL PROBE NO.

SBI

FILE: E111305-140

PAGE 1 OF 2

WATER LEVEL DATA		DATE:	3/15/2011	PROJECT: Building 11E Limited Phase II ESA Great Lakes Naval Base North Chicago, Illinois
N.A.	FT. WHILE DRILLING	TIME:	8:00	
N.A.	FT. AT COMPLETION	DRILLER:	Earth Solutions, Inc.	
N.A.	FT. AT 0 HR. A.D.	LOGGED BY:	RAJ	

DEPTH (FT.)	GROUND ELEVATION (EST.) = 590 FT. STRATA ELEVATION/DEPTH SOIL DESCRIPTION GRAPHIC LOG	LITHOLOGY TYPE	SAMPLE DATA						COMMENTS	DEPTH (FT.)
			SAMPLE TYPE	SAMPLE DEPTH	RECOVERY (%)	MOISTURE	PENTROMETER (tons/sq. ft.)	PID READING (ppm units)		
	Asphalt and Concrete, grading into brown silty clay.		M.C.		90	N		0.0		
2.5	Moist, coarse brown sand.		M.C.	X (3')	100	M		0.0		2.5
5.0			M.C.		100	M		0.0		5.0
7.5			M.C.	X (6')	100	M		0.0		7.5
10.0			M.C.	X (9')	100	M		0.1		10.0
12.5	End of boring @ 12'		M.C.		100	M		0.0		12.5
15.0										15.0
17.5										17.5
20.0										20.0
22.5										22.5

OBSERVATIONS	SAMPLE TYPE	COHESIVE COILS		ESTIMATED PROPORTIONS OF MATERIAL	SAMPLE MOISTURE
W.D. - WHILE DRILLING A.D. - AFTER DRILLING N.O. - NONE OBSERVED N.A. - NOT AVAILABLE	L.B. - 24" LARGE BORE SAMPLER M.C. - 48" MACRO CORE SAMPLER S.T. - SPLIT SPOON SAMPLE D.T. - DUEL TUBE SAMPLER	<u>PEN READ</u> 0.00-0.25 0.26-0.49 0.51-0.99 1.00-1.99 2.0-3.99 4.00+	<u>CONSISTENCY</u> VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	TRACE = 1 TO 10% LITTLE = 10 TO 20% SOME = 20 TO 35% SAND = 35 TO 50%	D = DAMP M = MOIST W = WET S = SLIGHTLY N = NONE

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual



Environmental Consulting Group, Inc.
 411 S. Wells Street, Suite 700
 Chicago, Illinois 60607
 (312) 663-3900

LOG OF SOIL PROBE NO.

SB2

FILE: E111305-140

PAGE 2 OF 2

WATER LEVEL DATA		DATE:	3/15/2011	PROJECT: Building 11E Limited Phase II ESA Great Lakes Naval Base North Chicago, Illinois
N.A.	FT. WHILE DRILLING	TIME:	8:40	
N.A.	FT. AT COMPLETION	DRILLER:	Earth Solutions, Inc.	
N.A.	FT. AT 0 HR. A.D.	LOGGED BY:	RAJ	

DEPTH (FT.)	GROUND ELEVATION (EST.) = 590 FT. STRATA ELEVATION/DEPTH SOIL DESCRIPTION GRAPHIC LOG	LITHOLOGY TYPE	SAMPLE DATA						COMMENTS	DEPTH (FT.)
			SAMPLE TYPE	SAMPLE DEPTH	RECOVERY (%)	MOISTURE	PENTROMETER (tons/sq. ft.)	PID READING (ppm units)		
	Gravel cover, grading into moist, brown sand.		M.C.		90	N		0.0		
2.5	Moist, coarse brown sand.		M.C.	X (3')	100	M		0.1		2.5
5.0			M.C.		100	M		0.0		5.0
7.5			M.C.	X (6')	100	M		0.1		7.5
10.0			M.C.	X (9')	100	M		0.0		10.0
12.5	End of boring @ 12'		M.C.		100	M		0.0		12.5
15.0										15.0
17.5										17.5
20.0										20.0
22.5										22.5

OBSERVATIONS	SAMPLE TYPE	COHESIVE COILS		ESTIMATED PROPORTIONS OF MATERIAL	SAMPLE MOISTURE
W.D. - WHILE DRILLING A.D. - AFTER DRILLING N.O. - NONE OBSERVED N.A. - NOT AVAILABLE	L.B. - 24" LARGE BORE SAMPLER M.C. - 48" MACRO CORE SAMPLER S.T. - SPLIT SPOON SAMPLE D.T. - DUEL TUBE SAMPLER	<u>PEN READ</u> 0.00-0.25 0.26-0.49 0.51-0.99 1.00-1.99 2.0-3.99 4.00+	<u>CONSISTENCY</u> VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	TRACE = 1 TO 10% LITTLE = 10 TO 20% SOME = 20 TO 35% SAND = 35 TO 50%	D = DAMP M = MOIST W = WET S = SLIGHTLY N = NONE

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual