

SUMMARY REPORT
75 EAGLE LANE (FORMERLY 1296 EAGLE LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9324 Virginia Avenue
Norfolk, Virginia 23511-3095

and



Naval Facilities Engineering Command Atlantic
9324 Virginia Avenue
Norfolk, Virginia 23511-3095

JUNE 2021

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Prepared by:



CDM - AECOM Multimedia Joint Venture
10560 Arrowhead Drive, Suite 500
Fairfax, Virginia 22030

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021

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List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
IDIQ	Indefinite Delivery, Indefinite Quantity
IGWA	Initial Groundwater Assessment
JV	Joint Venture
LBMH	Laurel Bay Military Housing
MCAS	Marine Corps Air Station
NAVFAC Mid-Lant	Naval Facilities Engineering Command Mid-Atlantic
NFA	No Further Action
PAH	polynuclear aromatic hydrocarbon
QAPP	Quality Assurance Program Plan
RBSL	risk-based screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	LBMH area at MCAS Beaufort, South Carolina
UST	underground storage tank
VISL	vapor intrusion screening level

1.0 INTRODUCTION

The CDM - AECOM Multimedia Joint Venture (JV) was contracted by the Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC Mid-Lant) to provide reporting services for the heating oil underground storage tanks (USTs) located in Laurel Bay Military Housing (LBMH) area at the Marine Corps Air Station (MCAS) Beaufort, South Carolina (Site). This work has been awarded under Contract Task Order (CTO) WE52 of the Indefinite Delivery, Indefinite Quantity (IDIQ) Multimedia Environmental Compliance Contract (Contract No. N62470-14-D-9016).

As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample nomenclature and reporting documents.

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 75 Eagle Lane (Formerly 1296 Eagle Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

- Background information;
- Sampling activities and results; and
- A determination of the property status.

1.1 Background Information

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.

Capehart style homes within the LBMH area were formerly heated using heating oil stored in USTs at each residence. There were 1,100 Capehart style housing units in the LBMH area. The newer duplex homes within the LBMH area never utilized heating oil tanks. Heating oil has not been used at Laurel Bay since the mid-1980s. As was the accepted practice at the time, USTs were drained, filled with dirt, capped, and left in place when they were removed from service. Residential USTs are not regulated in the State of South Carolina (i.e., there are no federal or state laws governing installation, management, or removal).

In 2007, MCAS Beaufort began a voluntary program to remove the unregulated, residential USTs and conduct sampling activities to determine if, and to what extent, petroleum constituents may have impacted the surrounding environment. MCAS Beaufort coordinated with SCDHEC to develop removal procedures that were consistent with procedural requirements for regulated USTs. All tank removal activities and follow-on actions are conducted in coordination with SCDHEC. To date, all known USTs have been removed from all residential properties within the LBMH area.

1.2 UST Removal and Assessment Process

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division, Revision 3.1* (SCDHEC, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, (SCDHEC, 2018), are as follows:

- benzene, toluene, ethylbenzene, and xylenes (BTEX),
- naphthalene, and
- five select polynuclear aromatic hydrocarbon (PAHs): benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and dibenz(a,h)anthracene.

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management Division* (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels

used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion and the necessity for an investigation associated with this media. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 75 Eagle Lane (Formerly 1296 Eagle Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1296 Eagle Lane* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On May 16, 2011, a single 280 gallon heating oil UST was removed from the front yard adjacent to the driveway area at 75 Eagle Lane (Formerly 1296 Eagle Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'0" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in

accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report presented in Appendix B. The laboratory analytical data report includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 75 Eagle Lane (Formerly 1296 Eagle Lane) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 75 Eagle Lane (Formerly 1296 Eagle Lane). This NFA determination was obtained in a letter dated July 1, 2015. SCDHEC's NFA letter is provided in Appendix C.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2011. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1296 Eagle Lane, Laurel Bay Military Housing Area*, September 2011.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0*, April 2013.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0*, May 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1*, February 2016.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.

Table

Table 1
Laboratory Analytical Results - Soil
75 Eagle Lane (Formerly 1296 Eagle Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 05/16/11
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL.

EPA - United States Environmental Protection Agency

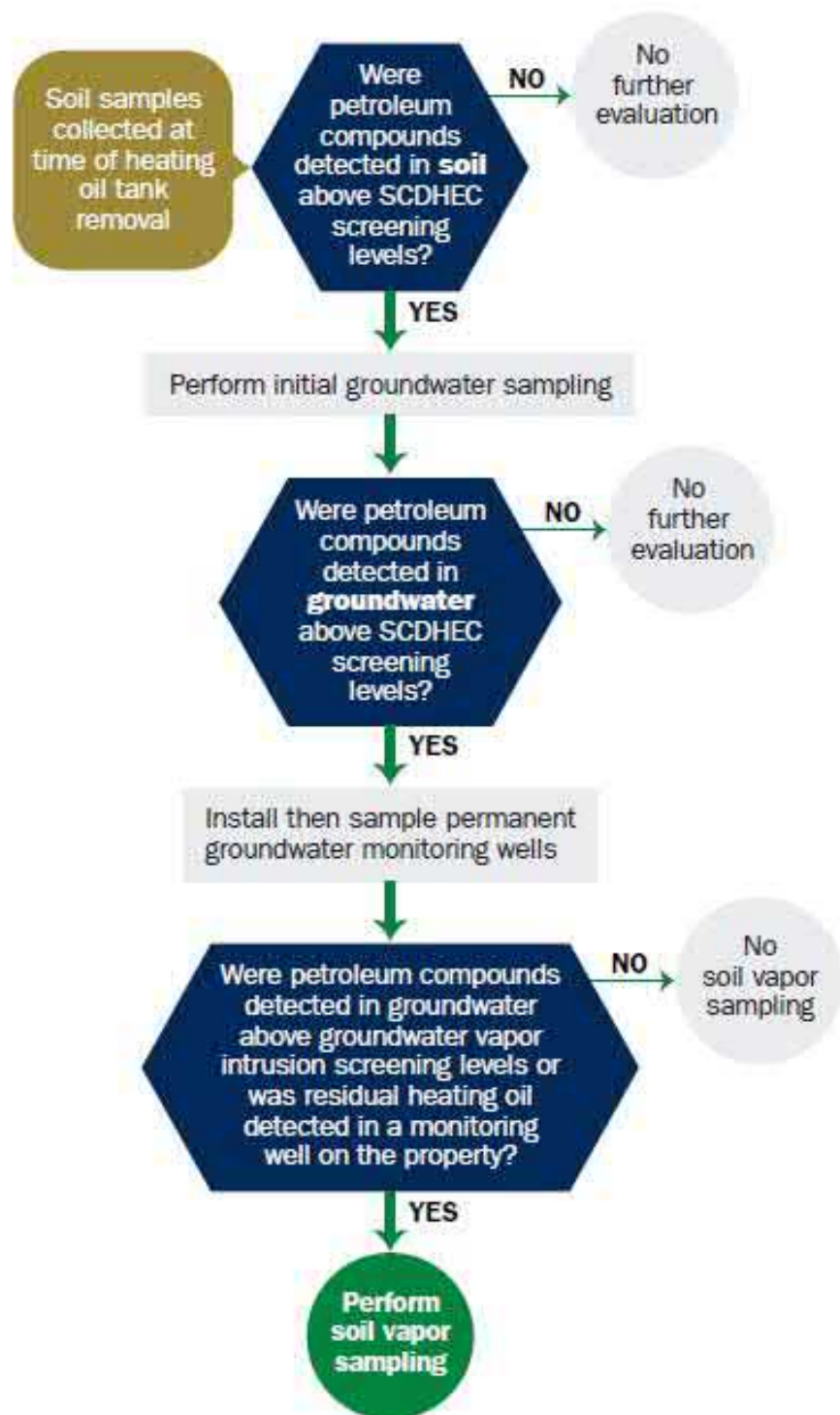
mg/kg - milligram per kilogram

ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

Rec'd 9/30/11

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)
Underground Storage Tank (UST) Assessment Report

Date Received State Use Only

Submit Completed Form To:
UST Program
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)		
Owner Name (Corporation, Individual, Public Agency, Other)		
P.O. Box 55001		
Mailing Address		
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC	
Facility Name or Company Site Identifier	
1296 Eagle Lane, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ at Permit ID Number _____ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES** ____ **NO** ____ (check one)

If you answered **YES** to the above question, please complete the following information:

My policy provider is: _____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

IV. REQUEST FOR SUPERB FUNDING

I **DO** / **DO NOT** wish to participate in the SUPERB Program. (Circle one.)

V. CERTIFICATION (To be signed by the UST owner)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

Notary Public for the state of _____.
Please affix State seal if you are commissioned outside South Carolina

VI. UST INFORMATION

A. Product...(ex. Gas, Kerosene).....

B. Capacity..(ex. 1k, 2k).....

C. Age.....

D. Construction Material..(ex. Steel, FRP).....

E. Month/Year of Last Use.....

F. Depth (ft.) To Base of Tank.....

G. Spill Prevention Equipment Y/N.....

H. Overfill Prevention Equipment Y/N.....

I. Method of Closure Removed/Filled.....

J. Date Tanks Removed/Filled.....

K. Visible Corrosion or Pitting Y/N.....

L. Visible Holes Y/N.....

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)

UST 1296Eagle was removed from the ground and disposed of at a
Subtitle "D" landfill. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)

UST 1296Eagle had been previously filled with sand by others.

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST

Corrosion, pitting and holes were found throughout the tank.

1296Eagle				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'				
No				
No				
Removed				
5/16/11				
Yes				
Yes				

VII. PIPING INFORMATION

A. Construction Material..(ex. Steel, FRP).....

B. Distance from UST to Dispenser.....

C. Number of Dispensers.....

D. Type of System Pressure or Suction.....

E. Was Piping Removed from the Ground? Y/N

F. Visible Corrosion or Pitting Y/N.....

G. Visible Holes Y/N.....

H. Age.....

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

1296Eagle				
Steel & Copper				
N/A				
N/A				
Suction				
Yes				
Yes				
No				
Late 1950s				

Corrosion and pitting were found on the surface of the steel vent pipe. Copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.

IX. SITE CONDITIONS

	Yes	No	Unk
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1296 Eagle	Excav at fill end	Soil	Sandy	6'	5/16/11 1530 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store the samples. Also include the preservative used for each sample. Please use the space provided below.

Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC Assessment Guidelines. Sample containers were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted from area below tank. The samples were marked, logged, and immediately placed in a sample cooler packed with ice to maintain an approximate temperature of 4 degrees Centigrade. Tools were thoroughly cleaned and decontaminated with the seven step decon process after each use. The samples remained in custody of SBG-EEG, Inc. until they were transferred to Test America Incorporated for analysis as documented in the Chain of Custody Record.

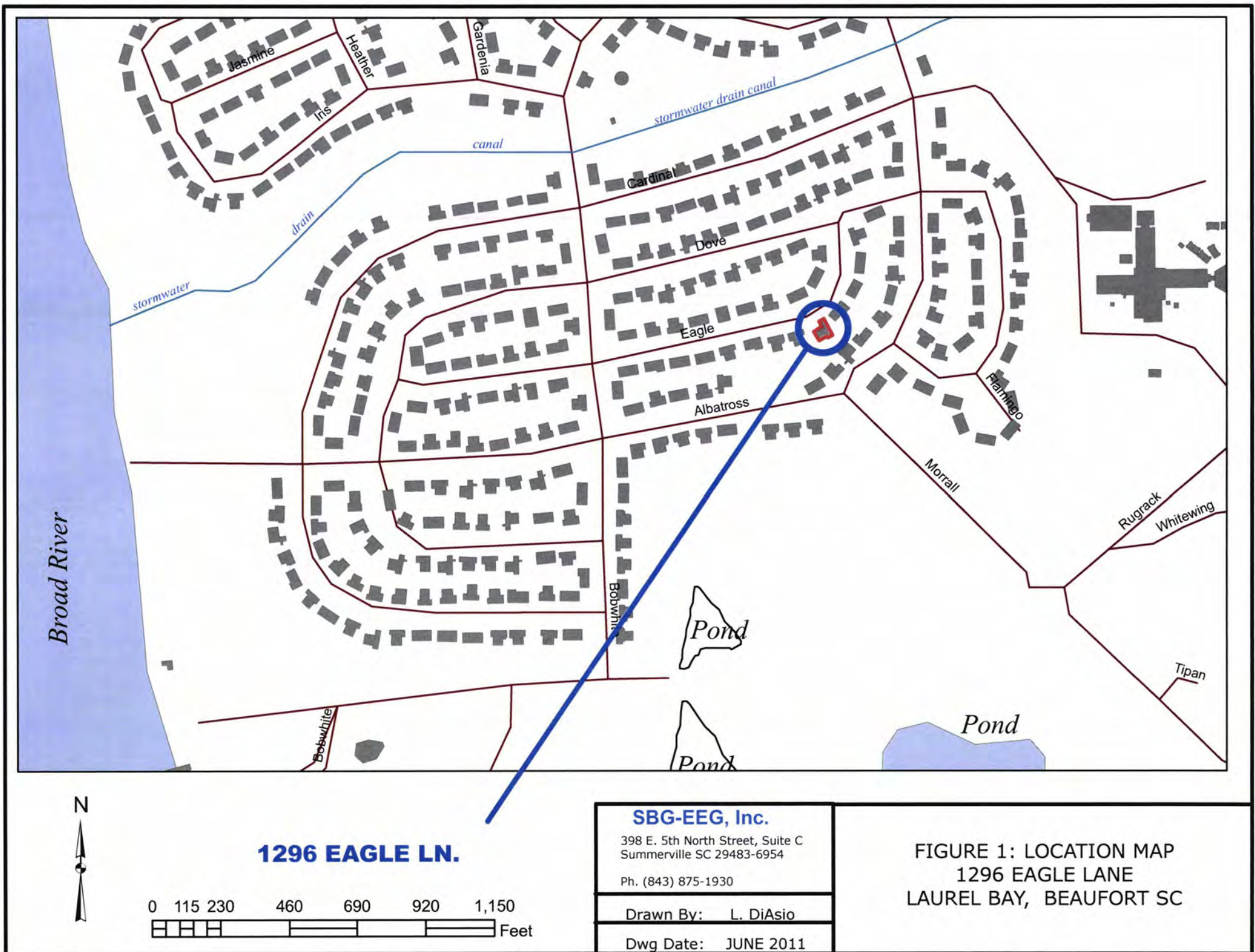
XII. RECEPTORS

		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *~770' to stormwater canal & ~ 1,000' to pond If yes, indicate type of receptor, distance, and direction on site map.	*X	
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable & fiber optic If yes, indicate the type of utility, distance, and direction on the site map.	*X	
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.		X

XIII. SITE MAP

You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)



POND \approx 1,000' 
STORMWATER CANAL 770' 



SCREENED
PORCH

1296 EAGLE LN.
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

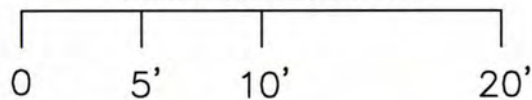
CONCRETE
PORCH &
WALK

CAR PORT

UST 1296EAGLE

ASPHALT
DRIVEWAY

GRAPHIC SCALE



SBG-EEG

10179 HWY 78
LADSON, SC 29456

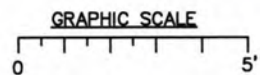
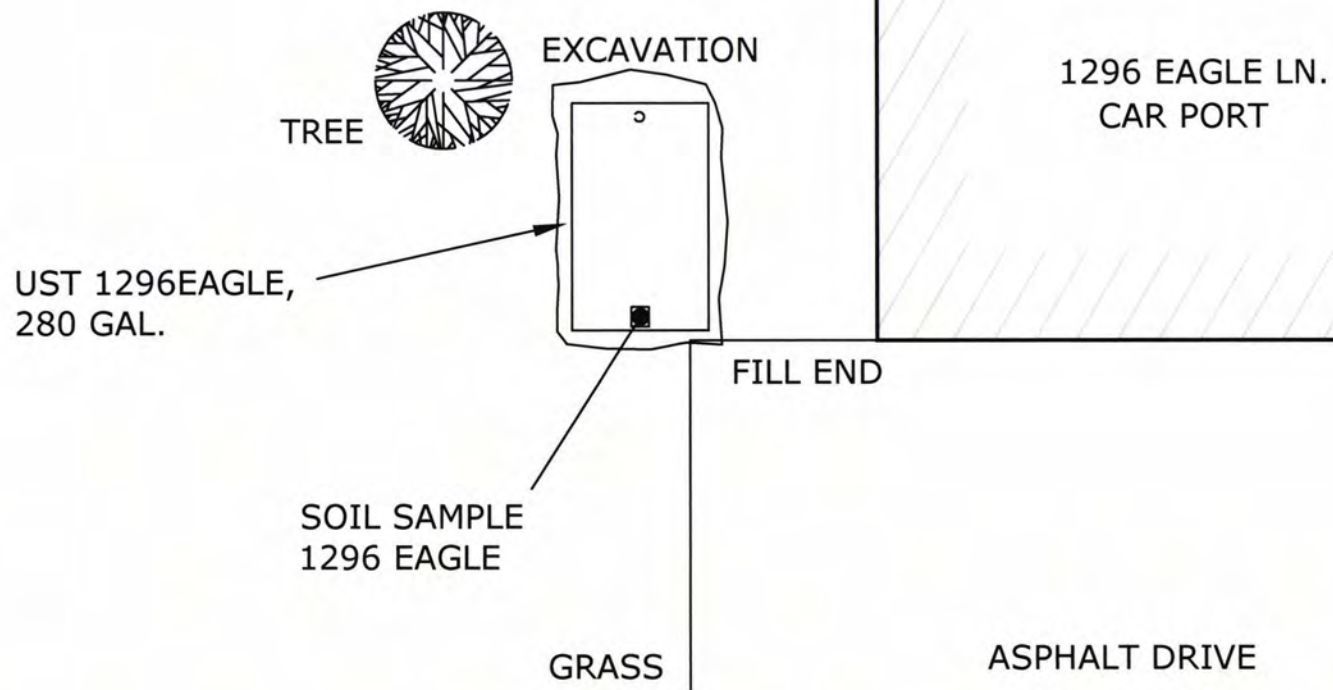
ph. (843) 879-0400

FIGURE 2 SITE MAP
1296 EAGLE LN., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JUNE 2011

POND \approx 1,000' 
STORMWATER CANAL 770' 



UST 1296EAGLE WAS
36" BELOW GRADE.

SBG-EEG

10179 HWY 78
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS
1296 EAGLE LN., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JUNE 2011



Picture 1: Location of UST 1296Eagle.



Picture 2: UST 1296Eagle site after completion of work.

XIV. SUMMARY OF ANALYSIS RESULTS

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC	UST	1296Eagle						
Benzene		ND						
Toluene		ND						
Ethylbenzene		ND						
Xylenes		ND						
Naphthalene		ND						
Benzo (a) anthracene		ND						
Benzo (b) fluoranthene		ND						
Benzo (k) fluoranthene		ND						
Chrysene		ND						
Dibenz (a, h) anthracene		ND						
TPH (EPA 3550)								

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

(Attach Certified Analytical Results and Chain-of-Custody Here)
(Please see Form #4)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Road

Nashville, TN 37204

Tel: 800-765-0980

TestAmerica Job ID: NUE3716

Client Project/Site: [none]

Client Project Description: Laurel Bay Housing Project

For:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn: Tom McElwee



Authorized for release by:

06/06/2011 05:25:39 PM

Ken A. Hayes

Senior Project Manager

ken.hayes@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?

**? Ask
The
Expert**

Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Chain of Custody	15



Sample Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUE3716-01	1296 Eagle	Soil	05/16/11 15:30	05/21/11 09:00
NUE3716-02	1217 Cardinal	Soil	05/17/11 15:45	05/21/11 09:00

1

2

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Definitions/Glossary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

GCMS Semivolatiles

Qualifier	Qualifier Description
R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

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Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Client Sample ID: 1296 Eagle

Lab Sample ID: NUE3716-01

Date Collected: 05/16/11 15:30

Matrix: Soil

Date Received: 05/21/11 09:00

Percent Solids: 94.1

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00215	0.00118	mg/kg dry	☼	05/16/11 15:30	05/27/11 14:58	1.00
Ethylbenzene	ND		0.00215	0.00105	mg/kg dry	☼	05/16/11 15:30	05/27/11 14:58	1.00
Naphthalene	ND		0.00538	0.00183	mg/kg dry	☼	05/16/11 15:30	05/27/11 14:58	1.00
Toluene	ND		0.00215	0.000957	mg/kg dry	☼	05/16/11 15:30	05/27/11 14:58	1.00
Xylenes, total	ND		0.00538	0.00204	mg/kg dry	☼	05/16/11 15:30	05/27/11 14:58	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		67 - 138	05/16/11 15:30	05/27/11 14:58	1.00
Dibromofluoromethane	100		75 - 125	05/16/11 15:30	05/27/11 14:58	1.00
Toluene-d8	100		76 - 129	05/16/11 15:30	05/27/11 14:58	1.00
4-Bromofluorobenzene	100		67 - 147	05/16/11 15:30	05/27/11 14:58	1.00

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0707	0.0148	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Acenaphthylene	ND		0.0707	0.0211	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Anthracene	ND		0.0707	0.00950	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Benzo (a) anthracene	ND		0.0707	0.0116	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Benzo (a) pyrene	ND		0.0707	0.00844	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Benzo (b) fluoranthene	ND		0.0707	0.0401	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Benzo (g,h,i) perylene	ND		0.0707	0.00950	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Benzo (k) fluoranthene	ND		0.0707	0.0390	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Chrysene	ND		0.0707	0.0327	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Dibenz (a,h) anthracene	ND		0.0707	0.0158	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Fluoranthene	ND		0.0707	0.0116	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Fluorene	ND		0.0707	0.0211	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0707	0.0327	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Naphthalene	ND		0.0707	0.0148	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Phenanthrene	ND		0.0707	0.0106	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
Pyrene	ND		0.0707	0.0243	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
1-Methylnaphthalene	ND		0.0707	0.0127	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00
2-Methylnaphthalene	ND		0.0707	0.0222	mg/kg dry	☼	05/23/11 14:15	05/24/11 17:43	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	55		18 - 120	05/23/11 14:15	05/24/11 17:43	1.00
2-Fluorobiphenyl	43		14 - 120	05/23/11 14:15	05/24/11 17:43	1.00
Nitrobenzene-d5	41		17 - 120	05/23/11 14:15	05/24/11 17:43	1.00

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	94.1		0.500	0.500	%		05/26/11 16:00	05/27/11 10:24	1.00

TestAmerica Nashville

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Client Sample ID: 1217 Cardinal

Lab Sample ID: NUE3716-02

Date Collected: 05/17/11 15:45

Matrix: Soil

Date Received: 05/21/11 09:00

Percent Solids: 77

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00296	0.00163	mg/kg dry	☒	05/17/11 15:45	05/27/11 15:27	1.00
Ethylbenzene	ND		0.00296	0.00145	mg/kg dry	☒	05/17/11 15:45	05/27/11 15:27	1.00
Naphthalene	ND		0.00741	0.00252	mg/kg dry	☒	05/17/11 15:45	05/27/11 15:27	1.00
Toluene	ND		0.00296	0.00132	mg/kg dry	☒	05/17/11 15:45	05/27/11 15:27	1.00
Xylenes, total	ND		0.00741	0.00282	mg/kg dry	☒	05/17/11 15:45	05/27/11 15:27	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		67 - 138	05/17/11 15:45	05/27/11 15:27	1.00
Dibromofluoromethane	101		75 - 125	05/17/11 15:45	05/27/11 15:27	1.00
Toluene-d8	104		76 - 129	05/17/11 15:45	05/27/11 15:27	1.00
4-Bromofluorobenzene	122		67 - 147	05/17/11 15:45	05/27/11 15:27	1.00

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0850	0.0178	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Acenaphthylene	ND		0.0850	0.0254	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Anthracene	ND		0.0850	0.0114	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Benzo (a) anthracene	ND		0.0850	0.0140	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Benzo (a) pyrene	ND		0.0850	0.0102	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Benzo (b) fluoranthene	ND		0.0850	0.0482	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Benzo (g,h,i) perylene	ND		0.0850	0.0114	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Benzo (k) fluoranthene	ND		0.0850	0.0470	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Chrysene	ND		0.0850	0.0393	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Dibenz (a,h) anthracene	ND		0.0850	0.0190	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Fluoranthene	ND		0.0850	0.0140	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Fluorene	ND		0.0850	0.0254	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0850	0.0393	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Naphthalene	ND		0.0850	0.0178	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Phenanthrene	ND		0.0850	0.0127	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
Pyrene	ND		0.0850	0.0292	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
1-Methylnaphthalene	ND		0.0850	0.0152	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00
2-Methylnaphthalene	ND		0.0850	0.0267	mg/kg dry	☒	05/23/11 14:15	05/24/11 18:04	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	68		18 - 120	05/23/11 14:15	05/24/11 18:04	1.00
2-Fluorobiphenyl	61		14 - 120	05/23/11 14:15	05/24/11 18:04	1.00
Nitrobenzene-d5	60		17 - 120	05/23/11 14:15	05/24/11 18:04	1.00

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	77.0		0.500	0.500	%	☒	05/26/11 16:00	05/27/11 10:24	1.00

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 11E7001-BLK1

Matrix: Soil

Analysis Batch: U009511

Client Sample ID: 11E7001-BLK1

Prep Type: Total

Prep Batch: 11E7001_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		05/27/11 10:30	05/27/11 13:01	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		05/27/11 10:30	05/27/11 13:01	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		05/27/11 10:30	05/27/11 13:01	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		05/27/11 10:30	05/27/11 13:01	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		05/27/11 10:30	05/27/11 13:01	1.00

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102		67 - 138	05/27/11 10:30	05/27/11 13:01	1.00
Dibromofluoromethane	100		75 - 125	05/27/11 10:30	05/27/11 13:01	1.00
Toluene-d8	101		76 - 129	05/27/11 10:30	05/27/11 13:01	1.00
4-Bromofluorobenzene	97		67 - 147	05/27/11 10:30	05/27/11 13:01	1.00

Lab Sample ID: 11E7001-BS1

Matrix: Soil

Analysis Batch: U009511

Client Sample ID: 11E7001-BS1

Prep Type: Total

Prep Batch: 11E7001_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	Limits
Benzene	50.0	50.1		ug/kg		100	78 - 126
Ethylbenzene	50.0	50.6		ug/kg		101	79 - 130
Naphthalene	50.0	53.1		ug/kg		106	72 - 150
Toluene	50.0	47.8		ug/kg		96	76 - 126
Xylenes, total	150	149		ug/kg		99	80 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	96		67 - 138
Dibromofluoromethane	99		75 - 125
Toluene-d8	99		76 - 129
4-Bromofluorobenzene	97		67 - 147

Lab Sample ID: 11E7001-MS1

Matrix: Soil

Analysis Batch: U009511

Client Sample ID: NUE4490-06

Prep Type: Total

Prep Batch: 11E7001_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	Limits
Benzene	ND		0.0487	0.0504		mg/kg wet		103	42 - 141
Ethylbenzene	0.00103		0.0487	0.0622		mg/kg wet		126	21 - 165
Naphthalene	0.00510		0.0487	0.0768		mg/kg wet		147	10 - 160
Toluene	0.00192		0.0487	0.0842	M1	mg/kg wet		169	45 - 145
Xylenes, total	0.00472		0.146	0.293	M1	mg/kg wet		197	31 - 159

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
1,2-Dichloroethane-d4	97		67 - 138
Dibromofluoromethane	97		75 - 125
Toluene-d8	99		76 - 129
4-Bromofluorobenzene	114		67 - 147

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11E7001-MSD1

Matrix: Soil

Analysis Batch: U009511

Client Sample ID: NUE4490-06

Prep Type: Total

Prep Batch: 11E7001_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Matrix Spike Dup Unit	D	% Rec	Limits	RPD	Limit
Benzene	ND		0.0466	0.0448		mg/kg wet		96	42 - 141	12	50
Ethylbenzene	0.00103		0.0466	0.0469		mg/kg wet		99	21 - 165	28	50
Naphthalene	0.00510		0.0466	0.0472		mg/kg wet		90	10 - 160	48	50
Toluene	0.00192		0.0466	0.0518		mg/kg wet		107	45 - 145	48	50
Xylenes, total	0.00472		0.140	0.146	M1	mg/kg wet		101	31 - 159	67	50

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Matrix Spike Dup Limits
1,2-Dichloroethane-d4	95		67 - 138
Dibromofluoromethane	99		75 - 125
Toluene-d8	101		76 - 129
4-Bromofluorobenzene	110		67 - 147

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Lab Sample ID: 11E5727-BLK1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: 11E5727-BLK1

Prep Type: Total

Prep Batch: 11E5727_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0140	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Acenaphthylene	ND		0.0670	0.0200	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Anthracene	ND		0.0670	0.00900	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Benzo (a) anthracene	ND		0.0670	0.0110	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Benzo (a) pyrene	ND		0.0670	0.00800	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0380	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.00900	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0370	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Chrysene	ND		0.0670	0.0310	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0150	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Fluoranthene	ND		0.0670	0.0110	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Fluorene	ND		0.0670	0.0200	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0310	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Naphthalene	ND		0.0670	0.0140	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Phenanthrene	ND		0.0670	0.0100	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
Pyrene	ND		0.0670	0.0230	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
1-Methylnaphthalene	ND		0.0670	0.0120	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00
2-Methylnaphthalene	ND		0.0670	0.0210	mg/kg wet		05/23/11 14:15	05/24/11 14:07	1.00

Surrogate	Blank % Recovery	Blank Qualifier	Blank Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	92		18 - 120	05/23/11 14:15	05/24/11 14:07	1.00
2-Fluorobiphenyl	73		14 - 120	05/23/11 14:15	05/24/11 14:07	1.00
Nitrobenzene-d5	71		17 - 120	05/23/11 14:15	05/24/11 14:07	1.00

Lab Sample ID: 11E5727-BS1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: 11E5727-BS1

Prep Type: Total

Prep Batch: 11E5727_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	Limits
Acenaphthene	1.67	1.34		mg/kg wet		80	49 - 120

TestAmerica Nashville

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11E5727-BS1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: 11E5727-BS1

Prep Type: Total

Prep Batch: 11E5727_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthylene	1.67	1.18		mg/kg wet		71	52 - 120
Anthracene	1.67	1.52		mg/kg wet		91	58 - 120
Benzo (a) anthracene	1.67	1.47		mg/kg wet		88	57 - 120
Benzo (a) pyrene	1.67	1.51		mg/kg wet		90	55 - 120
Benzo (b) fluoranthene	1.67	1.53		mg/kg wet		92	51 - 123
Benzo (g,h,i) perylene	1.67	1.51		mg/kg wet		90	49 - 121
Benzo (k) fluoranthene	1.67	1.47		mg/kg wet		88	42 - 129
Chrysene	1.67	1.43		mg/kg wet		86	55 - 120
Dibenz (a,h) anthracene	1.67	1.53		mg/kg wet		92	50 - 123
Fluoranthene	1.67	1.57		mg/kg wet		94	58 - 120
Fluorene	1.67	1.46		mg/kg wet		88	54 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.53		mg/kg wet		92	50 - 122
Naphthalene	1.67	1.15		mg/kg wet		69	28 - 120
Phenanthrene	1.67	1.56		mg/kg wet		93	56 - 120
Pyrene	1.67	1.47		mg/kg wet		88	56 - 120
1-Methylnaphthalene	1.67	1.03		mg/kg wet		62	36 - 120
2-Methylnaphthalene	1.67	1.16		mg/kg wet		69	36 - 120

Surrogate	LCS % Recovery	LCS Qualifier	Limits
Terphenyl-d14	90		18 - 120
2-Fluorobiphenyl	72		14 - 120
Nitrobenzene-d5	62		17 - 120

Lab Sample ID: 11E5727-MS1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: NUE3609-13

Prep Type: Total

Prep Batch: 11E5727_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	ND		1.64	1.48		mg/kg wet		90	42 - 120
Acenaphthylene	ND		1.64	1.28		mg/kg wet		78	32 - 120
Anthracene	ND		1.64	1.62		mg/kg wet		98	10 - 200
Benzo (a) anthracene	ND		1.64	1.55		mg/kg wet		95	41 - 120
Benzo (a) pyrene	ND		1.64	1.56		mg/kg wet		95	33 - 121
Benzo (b) fluoranthene	ND		1.64	1.70		mg/kg wet		103	26 - 137
Benzo (g,h,i) perylene	0.0438		1.64	1.54		mg/kg wet		91	21 - 124
Benzo (k) fluoranthene	ND		1.64	1.45		mg/kg wet		88	14 - 140
Chrysene	ND		1.64	1.53		mg/kg wet		93	28 - 123
Dibenz (a,h) anthracene	ND		1.64	1.58		mg/kg wet		96	25 - 127
Fluoranthene	ND		1.64	1.66		mg/kg wet		101	38 - 120
Fluorene	ND		1.64	1.59		mg/kg wet		97	41 - 120
Indeno (1,2,3-cd) pyrene	ND		1.64	1.57		mg/kg wet		96	25 - 123
Naphthalene	0.0758		1.64	1.29		mg/kg wet		74	25 - 120
Phenanthrene	ND		1.64	1.66		mg/kg wet		101	37 - 120
Pyrene	ND		1.64	1.55		mg/kg wet		94	29 - 125
1-Methylnaphthalene	0.0669		1.64	1.14		mg/kg wet		65	19 - 120
2-Methylnaphthalene	0.0972		1.64	1.30		mg/kg wet		73	11 - 120

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
Terphenyl-d14	90		18 - 120

TestAmerica Nashville

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 11E5727-MS1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: NUE3609-13

Prep Type: Total

Prep Batch: 11E5727_P

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
2-Fluorobiphenyl	71		14 - 120
Nitrobenzene-d5	64		17 - 120

Lab Sample ID: 11E5727-MSD1

Matrix: Soil

Analysis Batch: U009075

Client Sample ID: NUE3609-13

Prep Type: Total

Prep Batch: 11E5727_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Matrix Spike Dup Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.62	1.08		mg/kg wet		67	42 - 120	32	40
Acenaphthylene	ND		1.62	0.915	R	mg/kg wet		57	32 - 120	33	30
Anthracene	ND		1.62	1.15		mg/kg wet		71	10 - 200	34	50
Benzo (a) anthracene	ND		1.62	1.12	R	mg/kg wet		69	41 - 120	32	30
Benzo (a) pyrene	ND		1.62	1.13		mg/kg wet		70	33 - 121	32	33
Benzo (b) fluoranthene	ND		1.62	1.19		mg/kg wet		74	26 - 137	35	42
Benzo (g,h,i) perylene	0.0438		1.62	1.11	R	mg/kg wet		66	21 - 124	33	32
Benzo (k) fluoranthene	ND		1.62	1.08		mg/kg wet		67	14 - 140	29	39
Chrysene	ND		1.62	1.10		mg/kg wet		68	28 - 123	32	34
Dibenz (a,h) anthracene	ND		1.62	1.12	R	mg/kg wet		69	25 - 127	34	31
Fluoranthene	ND		1.62	1.17		mg/kg wet		72	38 - 120	35	35
Fluorene	ND		1.62	1.15		mg/kg wet		71	41 - 120	32	37
Indeno (1,2,3-cd) pyrene	ND		1.62	1.13	R	mg/kg wet		70	25 - 123	33	32
Naphthalene	0.0758		1.62	0.968		mg/kg wet		55	25 - 120	29	42
Phenanthrene	ND		1.62	1.19	R	mg/kg wet		74	37 - 120	33	32
Pyrene	ND		1.62	1.13		mg/kg wet		70	29 - 125	31	40
1-Methylnaphthalene	0.0669		1.62	0.866		mg/kg wet		49	19 - 120	27	45
2-Methylnaphthalene	0.0972		1.62	0.980		mg/kg wet		54	11 - 120	28	50

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
Terphenyl-d14	67		18 - 120
2-Fluorobiphenyl	52		14 - 120
Nitrobenzene-d5	47		17 - 120

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11E6637-DUP1

Matrix: Soil

Analysis Batch: 11E6637

Client Sample ID: NUE3562-04

Prep Type: Total

Prep Batch: 11E6637_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
% Dry Solids	93.3		95.9		%		3	20

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

GCMS Volatiles

Analysis Batch: U009511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E7001-BS1	11E7001-BS1	Total	Soil	SW846 8260B	11E7001_P
11E7001-BLK1	11E7001-BLK1	Total	Soil	SW846 8260B	11E7001_P
NUE3716-01	1296 Eagle	Total	Soil	SW846 8260B	11E7001_P
NUE3716-02	1217 Cardinal	Total	Soil	SW846 8260B	11E7001_P
11E7001-MS1	NUE4490-06	Total	Soil	SW846 8260B	11E7001_P
11E7001-MSD1	NUE4490-06	Total	Soil	SW846 8260B	11E7001_P

Prep Batch: 11E7001_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E7001-BS1	11E7001-BS1	Total	Soil	EPA 5035	
11E7001-BLK1	11E7001-BLK1	Total	Soil	EPA 5035	
NUE3716-01	1296 Eagle	Total	Soil	EPA 5035	
NUE3716-02	1217 Cardinal	Total	Soil	EPA 5035	
11E7001-MS1	NUE4490-06	Total	Soil	EPA 5035	
11E7001-MSD1	NUE4490-06	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: U009075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E5727-BLK1	11E5727-BLK1	Total	Soil	SW846 8270D	11E5727_P
11E5727-BS1	11E5727-BS1	Total	Soil	SW846 8270D	11E5727_P
11E5727-MS1	NUE3609-13	Total	Soil	SW846 8270D	11E5727_P
11E5727-MSD1	NUE3609-13	Total	Soil	SW846 8270D	11E5727_P
NUE3716-01	1296 Eagle	Total	Soil	SW846 8270D	11E5727_P
NUE3716-02	1217 Cardinal	Total	Soil	SW846 8270D	11E5727_P

Prep Batch: 11E5727_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E5727-BLK1	11E5727-BLK1	Total	Soil	EPA 3550C	
11E5727-BS1	11E5727-BS1	Total	Soil	EPA 3550C	
11E5727-MS1	NUE3609-13	Total	Soil	EPA 3550C	
11E5727-MSD1	NUE3609-13	Total	Soil	EPA 3550C	
NUE3716-01	1296 Eagle	Total	Soil	EPA 3550C	
NUE3716-02	1217 Cardinal	Total	Soil	EPA 3550C	

Extractions

Analysis Batch: 11E6637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E6637-DUP1	NUE3562-04	Total	Soil	SW-846	11E6637_P
NUE3716-01	1296 Eagle	Total	Soil	SW-846	11E6637_P
NUE3716-02	1217 Cardinal	Total	Soil	SW-846	11E6637_P

Prep Batch: 11E6637_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11E6637-DUP1	NUE3562-04	Total	Soil	% Solids	
NUE3716-01	1296 Eagle	Total	Soil	% Solids	
NUE3716-02	1217 Cardinal	Total	Soil	% Solids	

TestAmerica Nashville

Lab Chronicle

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Client Sample ID: 1296 Eagle

Date Collected: 05/16/11 15:30

Date Received: 05/21/11 09:00

Lab Sample ID: NUE3716-01

Matrix: Soil

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.01	11E7001_P	05/16/11 15:30	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U009511	05/27/11 14:58	MJH/H	TAL NSH
Total	Prep	EPA 3550C		0.993	11E5727_P	05/23/11 14:15	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	U009075	05/24/11 17:43	JLF	TAL NSH
Total	Prep	% Solids		1.00	11E6637_P	05/26/11 16:00	AMS	TAL NSH
Total	Analysis	SW-846		1.00	11E6637	05/27/11 10:24	AMS	TAL NSH

Client Sample ID: 1217 Cardinal

Date Collected: 05/17/11 15:45

Date Received: 05/21/11 09:00

Lab Sample ID: NUE3716-02

Matrix: Soil

Percent Solids: 77

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.14	11E7001_P	05/17/11 15:45	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U009511	05/27/11 15:27	MJH/H	TAL NSH
Total	Prep	EPA 3550C		0.978	11E5727_P	05/23/11 14:15	JJR	TAL NSH
Total	Analysis	SW846 8270D		1.00	U009075	05/24/11 18:04	JLF	TAL NSH
Total	Prep	% Solids		1.00	11E6637_P	05/26/11 16:00	AMS	TAL NSH
Total	Analysis	SW-846		1.00	11E6637	05/27/11 10:24	AMS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Method Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Method	Method Description	Protocol	Laboratory
SW-846	General Chemistry Parameters		TAL NSH
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D	Polyaromatic Hydrocarbons by EPA 8270D		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Certification Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NUE3716

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	A2LA	ISO/IEC 17025	0	0453.07
TestAmerica Nashville	A2LA	WY UST	0	453.07
TestAmerica Nashville	AIHA	AIHA	0	100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	CALA	CALA	0	3744
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA100011
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	Nevada	State Program	9	TN00032
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA	0	S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219
TestAmerica Nashville	Wisconsin	State Program	5	998020430

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



TestAmerica

Nashville Division
2980 Foster Creighton
Nashville, TN 37204

Phone: 615-728-0177
Toll Free: 800-765-0980
Fax: 615-728-3404

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29450

Project Manager: Tom McElwee email: mcelwee@testa.com

Telephone Number: 843.412.2097

Sample Name: (Print) PRATH SHAW

Sampler Signature: [Signature]

Fax No.: (843) 879-0901

Site State: SC

PO#: 1027

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring?
Enforcement Action?

Yes ___ No ___
Yes ___ No ___

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	NH ₄ (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	Matrix	Analyze For:	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report	
1296 EAGLE	5/16/11	1530	5	X																							
1217 CARDINAL	5/17/11	1545	5	X																							
Special Instructions:																											
Retinquished by: <u>[Signature]</u> Date: <u>5/20/11</u> Time: <u>0900</u> Received by: <u>FEDEX</u> Date: <u>5/20/11</u> Time: <u>0900</u>																											
Laboratory Comments: Temperature Upon Receipt: <u>Y</u> VOCs Free of Headspaces? <u>N</u>																											

NUE3716
06/07/11 23 59

06/06/2011

ATTACHMENT A



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of 1				
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907		4. Generator's Phone 843-228-6461		Generator's Site Address (If different than mailing):		A. Manifest Number WMNA 00316813				
5. Transporter 1 Company Name EEG, INC.		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone 843-879-0411				
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone				
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936		10. US EPA ID Number		G. State Facility ID		H. State Facility Phone 843-987-4643				
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments			
	a. HEATING OIL TANKS FILLED WITH SAND WM Profile # 102655SC		No.	Type						
	b.									
	c.									
	d.									
J. Additional Descriptions for Materials Listed Above		K. Disposal Location								
15. Special Handling Instructions and Additional Information		Cell								
Purchase Order #		Grid								
16. GENERATOR'S CERTIFICATE:		EMERGENCY CONTACT / PHONE NO.:								
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.		Printed Name								
Signature "On behalf of"		Month								
		Day								
		Year								
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name				Signature	Month	Day	Year
	18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name				Signature	Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal		I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		Printed Name				Signature	Month	Day	Year

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

Appendix C

Regulatory Correspondence



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

July 1, 2015

Commanding Officer
Attention: NREAO Mr. William A. Drawdy
United State Marine Corps Air Station
Post Office Box 55001
Beaufort, SC 29904-5001

RE: No Further Action
Laurel Bay Underground Storage Tank Assessment Reports for:
See attached sheet

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the referenced Underground Storage Tanks (USTs) Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the referenced assessment reports and agrees there is no indication of soil or groundwater contamination on these properties, and therefore no further investigation is required at this time.

Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)
Craig Ehde (via email)
Bryan Beck (via email)



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: NFA
Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks)

111 Birch	363 Aspen
123 Banyan	364 Aspen
131 Banyan	366 Aspen
134 Banyan	369 Aspen
145 Laurel Bay	373 Aspen
150 Laurel Bay	381 Aspen
153 Laurel Bay	401 Elderberry
154 Laurel Bay	402 Elderberry
155 Laurel Bay	404 Elderberry
200 Balsam	410 Elderberry
202 Balsam	420 Elderberry
203 Balsam	424 Elderberry
208 Balsam	435 Elderberry Tank 3
210 Balsam	452 Elderberry
211 Balsam	460 Elderberry
220 Cypress	465 Dogwood
222 Cypress	477 Laurel Bay
223 Cypress	487 Laurel Bay
252 Beech Tank 2	513 Laurel Bay
271 Beech Tank 1	519 Laurel Bay
271 Beech Tank 2	524 Laurel Bay
284 Birch Tank 1	535 Laurel Bay
284 Birch Tank 2	553 Dahlia
308 Ash	590 Aster
311 Ash	591 Aster
312 Ash	610 Dahlia
317 Ash	612 Dahlia
318 Ash	628 Dahlia
337 Ash	636 Dahlia
351 Ash Tank 1	637 Dahlia Tank 1
351 Ash Tank 2	637 Dahlia Tank 2
355 Ash Tank 1	641 Dahlia
355 Ash Tank 2	642 Dahlia Tank 1
360 Aspen	642 Dahlia Tank 2

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

655 Camellia	920 Albacore
662 Camellia	922 Barracuda Tank 1
683 Camellia	922 Barracuda Tank 2
684 Camellia	924 Albacore
689 Abelia	925 Albacore
694 Abelia	926 Albacore
695 Abelia	930 Albacore
741 Blue Bell	931 Albacore
742 Blue Bell	933 Albacore
755 Althea	936 Albacore
757 Althea	938 Albacore
776 Laurel Bay	939 Albacore
777 Azalea	940 Albacore
779 Laurel Bay	1010 Foxglove
781 Laurel Bay	1066 Gardenia
802 Azalea	1068 Gardenia
816 Azalea	1071 Heather Tank 2
822 Azalea	1100 Iris Tank 2
823 Azalea	1128 Iris
825 Azalea	1178 Bobwhite
828 Azalea	1204 Cardinal
837 Azalea	1208 Cardinal
851 Dolphin	1209 Cardinal
856 Dolphin	1210 Cardinal
857 Dolphin	1215 Cardinal
861 Dolphin	1216 Cardinal
864 Dolphin	1217 Cardinal Tank 1
868 Dolphin	1217 Cardinal Tank 2
872 Dolphin	1233 Dove
879 Cobia	1244 Dove
886 Cobia	1250 Dove
888 Cobia	1252 Dove
889 Cobia	1254 Dove
901 Barracuda	1256 Dove
902 Barracuda	1258 Dove
903 Barracuda	1263 Dove
904 Barracuda	1269 Dove
909 Barracuda	1276 Dove
910 Barracuda	1283 Dove
914 Barracuda	1285 Dove
915 Barracuda	1288 Eagle

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

1296 Eagle	1330 Albatross
1307 Eagle	1331 Albatross
1321 Albatross	1333 Albatross
1322 Albatross	1334 Albatross
1327 Albatross	1335 Albatross
1328 Albatross	