

SUMMARY REPORT  
413 ASH STREET (FORMERLY 338 ASH STREET)  
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

SUMMARY REPORT  
413 ASH STREET (FORMERLY 338 ASH STREET)  
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

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

---

## Table of Contents

1.0	INTRODUCTION.....	1
1.1	BACKGROUND INFORMATION.....	1
1.2	UST REMOVAL AND ASSESSMENT PROCESS.....	2
2.0	SAMPLING ACTIVITIES AND RESULTS.....	3
2.1	UST REMOVAL AND SOIL SAMPLING .....	3
2.2	SOIL ANALYTICAL RESULTS.....	4
3.0	PROPERTY STATUS .....	4
4.0	REFERENCES.....	4

## Table

Table 1	Laboratory Analytical Results - Soil
---------	--------------------------------------

## Appendices

Appendix A	Multi-Media Selection Process for LBMH
Appendix B	UST Assessment Report
Appendix C	Regulatory Correspondence

---

## 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 413 Ash Street (Formerly 338 Ash Street). 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 413 Ash Street (Formerly 338 Ash Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 338 Ash Street* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B.

### 2.1 UST Removal and Soil Sampling

In November 2011, two 280 gallon heating oil USTs were removed from the landscaped area adjacent to the driveway at 413 Ash Street (Formerly 338 Ash Street). The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The USTs were 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 removals. According to the UST Assessment Report (Appendix B), the depths to the bases of the UST were 5'9" bgs (Tank 1) and 4'4" bgs (Tank 2) and a single soil sample

was collected for each from those depths. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removals, a soil sample was collected from the base of each 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 locations (Tanks 1 and 2) 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 the former UST locations (Tanks 1 and 2) at 413 Ash Street (Formerly 338 Ash Street) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former USTs 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 413 Ash Street (Formerly 338 Ash Street). This NFA determination was obtained in a letter dated May 15, 2014. SCDHEC's NFA letter is provided in Appendix C.

## 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 338 Ash Street, Laurel Bay Military Housing Area*, February 2012.



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**  
**413 Ash Street (Formerly 338 Ash Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 11/22/11 and 11/23/11	
		338 Ash-1 11/22/11	338 Ash-2 11/23/11
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	ND
Ethylbenzene	1.15	ND	ND
Naphthalene	0.036	ND	ND
Toluene	0.627	ND	ND
Xylenes, Total	13.01	ND	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	ND	ND
Benzo(b)fluoranthene	0.66	ND	ND
Benzo(k)fluoranthene	0.66	ND	ND
Chrysene	0.66	ND	ND
Dibenz(a,h)anthracene	0.66	ND	ND

**Notes:**

<sup>(1)</sup> 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**

## 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

338 Ash Street, 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 338Ash-1 was removed from the ground, cleaned and recycled.

UST 338Ash-2 was removed from the ground, and disposed 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)

Contaminated water was pumped from UST 338Ash-1 and disposed by MCAS.

UST 338Ash-2 was 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 in both tanks.

338Ash-1	338Ash-2	
Heating oil	Heating oil	
280 gal	280 gal	
Late 1950s	Late 1950s	
Steel	Steel	
Mid 80s	Mid 80s	
5'9"	4'4"	
No	No	
No	No	
Removed	Removed	
11/22/11	11/23/11	
Yes	Yes	
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.

338Ash-1	338Ash-2	
Steel & Copper	Steel & Copper	
N/A	N/A	
N/A	N/A	
Suction	Suction	
Yes	Yes	
Yes	Yes	
No	No	
Late 1950s	Late 1950s	

Steel vent piping for both tanks were corroded and pitted. All

copper supply and return piping 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 #
338Ash-1	Excav at fill end	Soil	Sandy	5'9"	11/22/11 1400 hrs	P. Shaw	
338Ash-2	Excav at fill end	Soil	Sandy	4'4"	11/23/11 1045 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

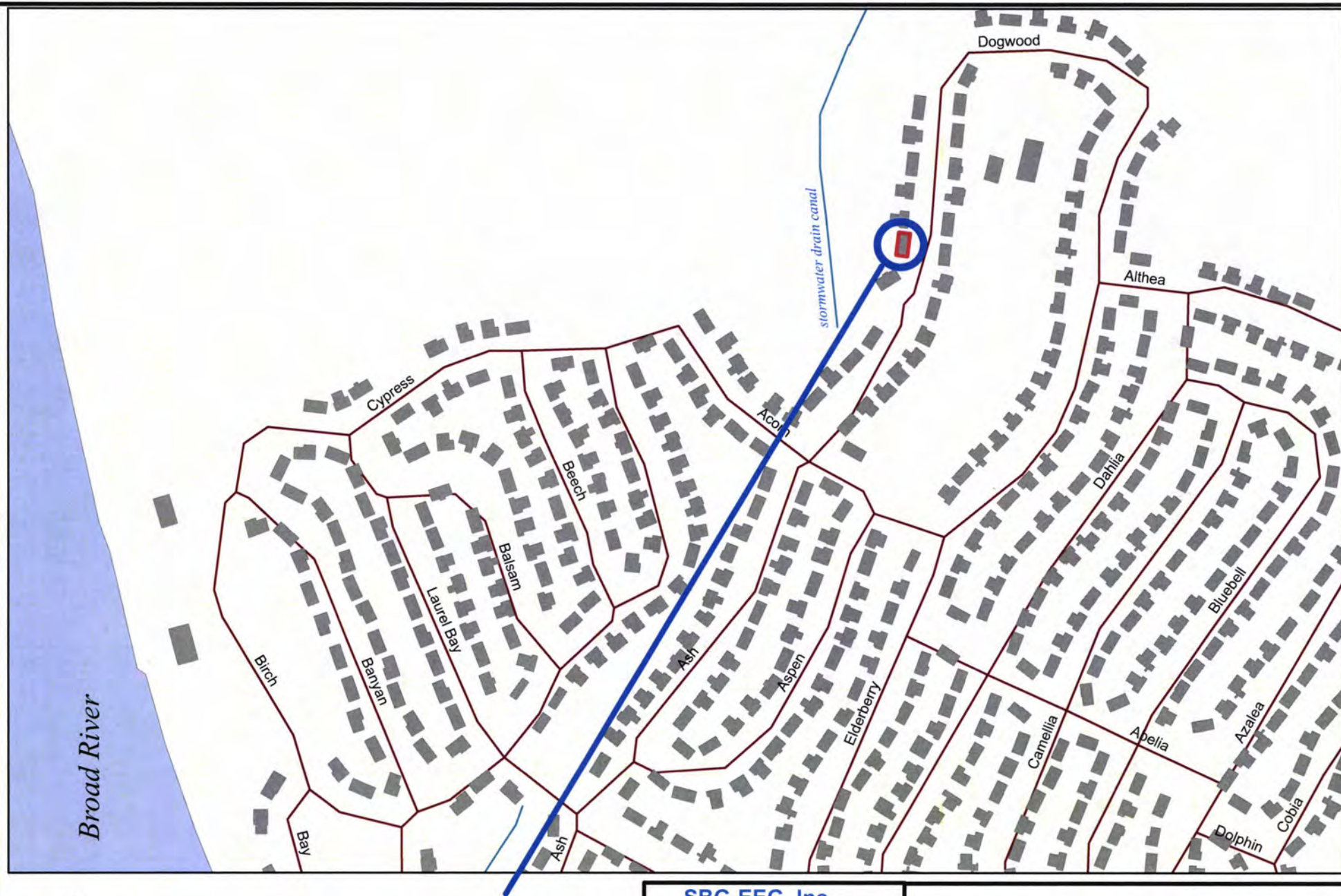
	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p style="text-align: right;">*stormwater canal ~325'</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>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?</p> <p style="text-align: right;">*Sewer, water, electricity, cable &amp; fiber optic</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

### **XIII. SITE MAP**

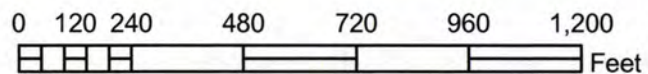
**You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.**

(Attach Site Map Here)





**338 ASH**



**SBG-EEG, Inc.**

7301 Rivers Ave., Suite 245  
N. Charleston SC 29406-9643

Ph. (843) 573-7140

Drawn By: L. DiAsio

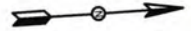
Dwg Date: DEC 2011

**FIGURE 1: LOCATION MAP  
338 ASH STREET  
LAUREL BAY, BEAUFORT SC**





STORMWATER DRAINAGE  
CANAL  $\approx$  325'



338 ASH STREET  
LAUREL BAY MILITARY HOUSING  
MCAS BEAUFORT, SC

CONCRETE PORCH

CONCRETE WALK

ASPHALT  
DRIVEWAY

UST 338ASH-1,  
280 GAL.

UST 338ASH-2,  
280 GAL.

GRAPHIC SCALE

0 5' 10' 20'

**SBG-EEG**

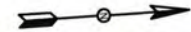
7301 RIVERS AVE., SUITE 245  
N. CHARLESTON, SC  
29406-9643

FIGURE 2 SITE MAP  
338 ASH ST., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JAN 2012

338 ASH STREET



EXCAVATION

FILL END

UST 338ASH-1

SOIL SAMPLE  
338 ASH-1

EXCAVATION

FILL END

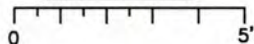
UST 338ASH-2

SOIL SAMPLE  
338 ASH-2



STORMWATER DRAINAGE  
CANAL ≈ 325'

GRAPHIC SCALE



TANK DEPTH BELOW GRADE

338ASH-1 = 33"

338ASH-2 = 16"

***SBG-EEG***

7301 RIVERS AVE., SUITE 245  
N. CHARLESTON, SC  
29406-9643

FIGURE 3 UST SAMPLE LOCATIONS  
338 ASH ST., LAUREL BAY  
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JAN 2012





Picture 1: Location of tanks at 338 Ash Street.



Picture 2: UST 338Ash-1 excavation pit.



Picture 3: UST 338 Ash-2 excavation in progress.



Picture 4: UST 338Ash-2 pit after tank removal.



#### 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	338Ash-1		338Ash-2			
Benzene		ND		ND			
Toluene		ND		ND			
Ethylbenzene		ND		ND			
Xylenes		ND		ND			
Naphthalene		ND		ND			
Benzo (a) anthracene		ND		ND			
Benzo (b) fluoranthene		ND		ND			
Benzo (k) fluoranthene		ND		ND			
Chrysene		ND		ND			
Dibenz (a, h) anthracene		ND		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: NUK3501

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:

12/12/2011 1:38:56 PM

Ken A. Hayes

Senior Project Manager

[ken.hayes@testamericainc.com](mailto:ken.hayes@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

Have a Question?



Visit us at:

[www.testamericainc.com](http://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.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	9
QC Association . . . . .	16
Chronicle . . . . .	18
Method Summary . . . . .	19
Certification Summary . . . . .	20
Chain of Custody . . . . .	21

## Sample Summary

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

TestAmerica Job ID: NUK3501

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUK3501-01	324 Ash	Soil	11/21/11 13:15	11/26/11 07:50
NUK3501-02	338 Ash-1	Soil	11/22/11 14:00	11/26/11 07:50
NUK3501-03	338 Ash-2	Soil	11/23/11 10:45	11/26/11 07:50

## Definitions/Glossary

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

TestAmerica Job ID: NUK3501

### Qualifiers

#### GCMS Volatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

#### GCMS Semivolatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### 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
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Client Sample Results

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

TestAmerica Job ID: NUK3501

Client Sample ID: 324 Ash

Lab Sample ID: NUK3501-01

Date Collected: 11/21/11 13:15

Matrix: Soil

Date Received: 11/26/11 07:50

Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00194	0.00107	mg/kg dry	☼	11/21/11 13:15	11/28/11 20:06	1.00
Toluene	0.00328		0.00194	0.00107	mg/kg dry	☼	11/21/11 13:15	11/28/11 20:06	1.00
Xylenes, total	0.284		0.00486	0.00243	mg/kg dry	☼	11/21/11 13:15	11/28/11 20:06	1.00

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
Dibromofluoromethane	99		70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
Toluene-d8	260	ZX	70 - 130				11/21/11 13:15	11/28/11 20:06	1.00
4-Bromofluorobenzene	270	ZX	70 - 130				11/21/11 13:15	11/28/11 20:06	1.00

## Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.530		0.105	0.0576	mg/kg dry	☼	11/21/11 13:15	11/29/11 16:45	50.0
Naphthalene	4.46		0.262	0.131	mg/kg dry	☼	11/21/11 13:15	11/29/11 16:45	50.0

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	93		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
Dibromofluoromethane	95		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
Toluene-d8	89		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0
4-Bromofluorobenzene	108		70 - 130				11/21/11 13:15	11/29/11 16:45	50.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Acenaphthylene	0.797		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Anthracene	1.33		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (a) anthracene	0.677		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (a) pyrene	0.435		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (b) fluoranthene	0.454		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (g,h,i) perylene	0.157		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Benzo (k) fluoranthene	0.447		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Chrysene	0.707		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Dibenz (a,h) anthracene	0.0986		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Fluoranthene	1.80		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Fluorene	ND		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Indeno (1,2,3-cd) pyrene	0.167		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00
Pyrene	1.96		0.0829	0.0421	mg/kg dry	☼	11/28/11 12:25	11/28/11 21:42	1.00

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	93		18 - 120				11/28/11 12:25	11/28/11 21:42	1.00
2-Fluorobiphenyl	71		14 - 120				11/28/11 12:25	11/28/11 21:42	1.00
Nitrobenzene-d5	186	ZX	17 - 120				11/28/11 12:25	11/28/11 21:42	1.00

## Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	8.06		1.66	0.841	mg/kg dry	☼	11/28/11 12:25	11/29/11 11:45	20.0
Phenanthrene	13.2		1.66	0.841	mg/kg dry	☼	11/28/11 12:25	11/29/11 11:45	20.0
1-Methylnaphthalene	29.1		1.66	0.841	mg/kg dry	☼	11/28/11 12:25	11/29/11 11:45	20.0
2-Methylnaphthalene	51.0		1.66	0.841	mg/kg dry	☼	11/28/11 12:25	11/29/11 11:45	20.0

## Client Sample Results

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

TestAmerica Job ID: NUK3501

**Client Sample ID: 324 Ash**

**Lab Sample ID: NUK3501-01**

**Date Collected: 11/21/11 13:15**

**Matrix: Soil**

**Date Received: 11/26/11 07:50**

**Percent Solids: 79.6**

### Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	79.6		0.500	0.500	%		11/30/11 12:38	12/01/11 11:44	1.00



# Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)

TestAmerica Job ID: NUK3501

Project/Site: [none]

Client Sample ID: 338 Ash-1

Lab Sample ID: NUK3501-02

Date Collected: 11/22/11 14:00

Matrix: Soil

Date Received: 11/26/11 07:50

Percent Solids: 77.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00208	0.00115	mg/kg dry	☼	11/22/11 14:00	11/28/11 20:37	1.00
Ethylbenzene	ND		0.00208	0.00115	mg/kg dry	☼	11/22/11 14:00	11/28/11 20:37	1.00
Naphthalene	ND		0.00521	0.00261	mg/kg dry	☼	11/22/11 14:00	11/28/11 20:37	1.00
Toluene	ND		0.00208	0.00115	mg/kg dry	☼	11/22/11 14:00	11/28/11 20:37	1.00
Xylenes, total	ND		0.00521	0.00261	mg/kg dry	☼	11/22/11 14:00	11/28/11 20:37	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	104		70 - 130	11/22/11 14:00	11/28/11 20:37	1.00
Dibromofluoromethane	102		70 - 130	11/22/11 14:00	11/28/11 20:37	1.00
Toluene-d8	88		70 - 130	11/22/11 14:00	11/28/11 20:37	1.00
4-Bromofluorobenzene	109		70 - 130	11/22/11 14:00	11/28/11 20:37	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Acenaphthylene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Anthracene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (a) anthracene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (a) pyrene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (b) fluoranthene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (g,h,i) perylene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Benzo (k) fluoranthene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Chrysene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Dibenz (a,h) anthracene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Fluoranthene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Fluorene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Naphthalene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Phenanthrene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
Pyrene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
1-Methylnaphthalene	ND		0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00
2-Methylnaphthalene	0.0715	J	0.0845	0.0429	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:02	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120	11/28/11 12:25	11/28/11 22:02	1.00
2-Fluorobiphenyl	73		14 - 120	11/28/11 12:25	11/28/11 22:02	1.00
Nitrobenzene-d5	73		17 - 120	11/28/11 12:25	11/28/11 22:02	1.00

## Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	77.7		0.500	0.500	%	-	11/30/11 12:38	12/01/11 11:44	1.00

# Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)

TestAmerica Job ID: NUK3501

Project/Site: [none]

**Client Sample ID: 338 Ash-2**

**Lab Sample ID: NUK3501-03**

**Date Collected: 11/23/11 10:45**

**Matrix: Soil**

**Date Received: 11/26/11 07:50**

**Percent Solids: 76.1**

## Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00218	0.00120	mg/kg dry	☼	11/23/11 10:45	11/29/11 15:43	1.00
Ethylbenzene	ND		0.00218	0.00120	mg/kg dry	☼	11/23/11 10:45	11/29/11 15:43	1.00
Naphthalene	ND		0.00546	0.00273	mg/kg dry	☼	11/23/11 10:45	11/29/11 15:43	1.00
Toluene	ND		0.00218	0.00120	mg/kg dry	☼	11/23/11 10:45	11/29/11 15:43	1.00
Xylenes, total	ND		0.00546	0.00273	mg/kg dry	☼	11/23/11 10:45	11/29/11 15:43	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102		70 - 130	11/23/11 10:45	11/29/11 15:43	1.00
Dibromofluoromethane	103		70 - 130	11/23/11 10:45	11/29/11 15:43	1.00
Toluene-d8	91		70 - 130	11/23/11 10:45	11/29/11 15:43	1.00
4-Bromofluorobenzene	129		70 - 130	11/23/11 10:45	11/29/11 15:43	1.00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Acenaphthylene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Anthracene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (a) anthracene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (a) pyrene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (b) fluoranthene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (g,h,i) perylene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Benzo (k) fluoranthene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Chrysene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Dibenz (a,h) anthracene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Fluoranthene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Fluorene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Naphthalene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Phenanthrene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
Pyrene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
1-Methylnaphthalene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00
2-Methylnaphthalene	ND		0.0869	0.0441	mg/kg dry	☼	11/28/11 12:25	11/28/11 22:23	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		18 - 120	11/28/11 12:25	11/28/11 22:23	1.00
2-Fluorobiphenyl	69		14 - 120	11/28/11 12:25	11/28/11 22:23	1.00
Nitrobenzene-d5	76		17 - 120	11/28/11 12:25	11/28/11 22:23	1.00

## Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	76.1		0.500	0.500	%		11/30/11 12:38	12/01/11 11:44	1.00



# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6686-BLK1

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/29/11 09:28	11/29/11 12:04	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
Dibromofluoromethane	102		70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
Toluene-d8	89		70 - 130	11/29/11 09:28	11/29/11 12:04	1.00
4-Bromofluorobenzene	103		70 - 130	11/29/11 09:28	11/29/11 12:04	1.00

Lab Sample ID: 11K6686-BLK2

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/29/11 09:28	11/29/11 12:35	50.0

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	101		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
Dibromofluoromethane	104		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
Toluene-d8	88		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0
4-Bromofluorobenzene	101		70 - 130	11/29/11 09:28	11/29/11 12:35	50.0

Lab Sample ID: 11K6686-BS1

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	50.7		ug/kg		101	75 - 127
Ethylbenzene	50.0	46.7		ug/kg		93	80 - 134
Naphthalene	50.0	46.4		ug/kg		93	69 - 150
Toluene	50.0	41.0		ug/kg		82	80 - 132
Xylenes, total	150	138		ug/kg		92	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	98		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	88		70 - 130
4-Bromofluorobenzene	103		70 - 130



# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6686-BSD1

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	55.6		ug/kg		111	75 - 127	9	50
Ethylbenzene	50.0	50.4		ug/kg		101	80 - 134	8	50
Naphthalene	50.0	50.6		ug/kg		101	69 - 150	8	50
Toluene	50.0	44.9		ug/kg		90	80 - 132	9	50
Xylenes, total	150	152		ug/kg		101	80 - 137	9	50

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
1,2-Dichloroethane-d4	101		70 - 130
Dibromofluoromethane	105		70 - 130
Toluene-d8	87		70 - 130
4-Bromofluorobenzene	102		70 - 130

Lab Sample ID: 11K6686-MS1

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: 338 Ash-2

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		2.76	3.35		mg/kg dry	☼	121	31 - 143
Ethylbenzene	ND		2.76	3.02		mg/kg dry	☼	109	23 - 161
Naphthalene	ND		2.76	2.50		mg/kg dry	☼	91	10 - 176
Toluene	ND		2.76	2.65		mg/kg dry	☼	96	30 - 155
Xylenes, total	ND		8.29	9.08		mg/kg dry	☼	110	25 - 162

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
1,2-Dichloroethane-d4	95		70 - 130
Dibromofluoromethane	100		70 - 130
Toluene-d8	85		70 - 130
4-Bromofluorobenzene	101		70 - 130

Lab Sample ID: 11K6686-MSD1

Matrix: Soil

Analysis Batch: U021104

Client Sample ID: 338 Ash-2

Prep Type: Total

Prep Batch: 11K6686\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		2.76	2.91		mg/kg dry	☼	105	31 - 143	14	50
Ethylbenzene	ND		2.76	2.60		mg/kg dry	☼	94	23 - 161	15	50
Naphthalene	ND		2.76	2.11		mg/kg dry	☼	76	10 - 176	17	50
Toluene	ND		2.76	2.31		mg/kg dry	☼	84	30 - 155	14	50
Xylenes, total	ND		8.29	7.86		mg/kg dry	☼	95	25 - 162	14	50

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
1,2-Dichloroethane-d4	96		70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8	86		70 - 130
4-Bromofluorobenzene	101		70 - 130

# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6689-BLK1

Matrix: Soil

Analysis Batch: U021078

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6689\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		11/28/11 09:45	11/28/11 13:51	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		11/28/11 09:45	11/28/11 13:51	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		11/28/11 09:45	11/28/11 13:51	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		11/28/11 09:45	11/28/11 13:51	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		11/28/11 09:45	11/28/11 13:51	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	102		70 - 130	11/28/11 09:45	11/28/11 13:51	1.00
Dibromofluoromethane	104		70 - 130	11/28/11 09:45	11/28/11 13:51	1.00
Toluene-d8	90		70 - 130	11/28/11 09:45	11/28/11 13:51	1.00
4-Bromofluorobenzene	101		70 - 130	11/28/11 09:45	11/28/11 13:51	1.00

Lab Sample ID: 11K6689-BLK2

Matrix: Soil

Analysis Batch: U021078

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6689\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		11/28/11 09:45	11/28/11 14:22	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		11/28/11 09:45	11/28/11 14:22	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		11/28/11 09:45	11/28/11 14:22	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		11/28/11 09:45	11/28/11 14:22	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		11/28/11 09:45	11/28/11 14:22	50.0

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		70 - 130	11/28/11 09:45	11/28/11 14:22	50.0
Dibromofluoromethane	103		70 - 130	11/28/11 09:45	11/28/11 14:22	50.0
Toluene-d8	92		70 - 130	11/28/11 09:45	11/28/11 14:22	50.0
4-Bromofluorobenzene	101		70 - 130	11/28/11 09:45	11/28/11 14:22	50.0

Lab Sample ID: 11K6689-BS1

Matrix: Soil

Analysis Batch: U021078

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11K6689\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	57.4		ug/kg		115	75 - 127
Ethylbenzene	50.0	50.8		ug/kg		102	80 - 134
Naphthalene	50.0	47.9		ug/kg		96	69 - 150
Toluene	50.0	46.8		ug/kg		94	80 - 132
Xylenes, total	150	151		ug/kg		101	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	101		70 - 130
Dibromofluoromethane	104		70 - 130
Toluene-d8	90		70 - 130
4-Bromofluorobenzene	101		70 - 130



# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6689-MS1				Client Sample ID: Matrix Spike			
Matrix: Soil				Prep Type: Total			
Analysis Batch: U021078				Prep Batch: 11K6689_P			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D %Rec Limits
Benzene	ND		2.20	2.52		mg/kg wet	115 31 - 143
Ethylbenzene	ND		2.20	2.36		mg/kg wet	107 23 - 161
Naphthalene	ND		2.20	1.84		mg/kg wet	84 10 - 176
Toluene	ND		2.20	2.27		mg/kg wet	103 30 - 155
Xylenes, total	ND		6.59	7.02		mg/kg wet	107 25 - 162
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits				
1,2-Dichloroethane-d4	94		70 - 130				
Dibromofluoromethane	102		70 - 130				
Toluene-d8	96		70 - 130				
4-Bromofluorobenzene	107		70 - 130				

Lab Sample ID: 11K6689-MSD1				Client Sample ID: Matrix Spike Duplicate			
Matrix: Soil				Prep Type: Total			
Analysis Batch: U021078				Prep Batch: 11K6689_P			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D %Rec Limits RPD Limit
Benzene	ND		2.20	2.73		mg/kg wet	124 31 - 143 8 50
Ethylbenzene	ND		2.20	2.51		mg/kg wet	114 23 - 161 6 50
Naphthalene	ND		2.20	2.25		mg/kg wet	102 10 - 176 20 50
Toluene	ND		2.20	2.23		mg/kg wet	102 30 - 155 2 50
Xylenes, total	ND		6.59	7.53		mg/kg wet	114 25 - 162 7 50
Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits				
1,2-Dichloroethane-d4	96		70 - 130				
Dibromofluoromethane	97		70 - 130				
Toluene-d8	88		70 - 130				
4-Bromofluorobenzene	107		70 - 130				

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

Lab Sample ID: 11K6276-BLK1						Client Sample ID: Method Blank			
Matrix: Soil						Prep Type: Total			
Analysis Batch: 11K6276						Prep Batch: 11K6276_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Chrysene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Fluoranthene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Fluorene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00

# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6276-BLK1

Matrix: Soil

Analysis Batch: 11K6276

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11K6276\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Phenanthrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
Pyrene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		11/28/11 12:25	11/28/11 18:38	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	89		18 - 120	11/28/11 12:25	11/28/11 18:38	1.00
2-Fluorobiphenyl	69		14 - 120	11/28/11 12:25	11/28/11 18:38	1.00
Nitrobenzene-d5	73		17 - 120	11/28/11 12:25	11/28/11 18:38	1.00

Lab Sample ID: 11K6276-BS1

Matrix: Soil

Analysis Batch: 11K6276

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11K6276\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.43		mg/kg wet		86	36 - 120
Acenaphthylene	1.67	1.41		mg/kg wet		85	38 - 120
Anthracene	1.67	1.64		mg/kg wet		99	46 - 124
Benzo (a) anthracene	1.67	1.61		mg/kg wet		96	45 - 120
Benzo (a) pyrene	1.67	1.87		mg/kg wet		112	45 - 120
Benzo (b) fluoranthene	1.67	1.66		mg/kg wet		99	42 - 120
Benzo (g,h,i) perylene	1.67	1.84		mg/kg wet		110	38 - 120
Benzo (k) fluoranthene	1.67	1.87		mg/kg wet		112	42 - 120
Chrysene	1.67	1.65		mg/kg wet		99	43 - 120
Dibenz (a,h) anthracene	1.67	1.86		mg/kg wet		112	32 - 128
Fluoranthene	1.67	1.64		mg/kg wet		98	46 - 120
Fluorene	1.67	1.64		mg/kg wet		98	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.85		mg/kg wet		111	41 - 121
Naphthalene	1.67	1.51		mg/kg wet		90	32 - 120
Phenanthrene	1.67	1.64		mg/kg wet		98	45 - 120
Pyrene	1.67	1.61		mg/kg wet		97	43 - 120
1-Methylnaphthalene	1.67	1.14		mg/kg wet		68	32 - 120
2-Methylnaphthalene	1.67	1.34		mg/kg wet		81	28 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	103		18 - 120
2-Fluorobiphenyl	81		14 - 120
Nitrobenzene-d5	78		17 - 120

Lab Sample ID: 11K6276-MS1

Matrix: Soil

Analysis Batch: 11K6276

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11K6276\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1.84	1.30		mg/kg dry	☼	71	19 - 120
Acenaphthylene	ND		1.84	1.27		mg/kg dry	☼	69	25 - 120
Anthracene	ND		1.84	1.46		mg/kg dry	☼	80	28 - 125
Benzo (a) anthracene	ND		1.84	1.44		mg/kg dry	☼	78	23 - 120



# QC Sample Results

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

TestAmerica Job ID: NUK3501

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

Lab Sample ID: 11K6276-MS1

Matrix: Soil

Analysis Batch: 11K6276

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11K6276\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
Benzo (a) pyrene	ND		1.84	1.65		mg/kg dry	☼	90	15 - 128
Benzo (b) fluoranthene	ND		1.84	1.79		mg/kg dry	☼	98	12 - 133
Benzo (g,h,i) perylene	ND		1.84	1.62		mg/kg dry	☼	88	22 - 120
Benzo (k) fluoranthene	ND		1.84	1.32		mg/kg dry	☼	72	28 - 120
Chrysene	ND		1.84	1.48		mg/kg dry	☼	80	20 - 120
Dibenz (a,h) anthracene	ND		1.84	1.63		mg/kg dry	☼	89	12 - 128
Fluoranthene	ND		1.84	1.46		mg/kg dry	☼	79	10 - 143
Fluorene	ND		1.84	1.47		mg/kg dry	☼	80	20 - 120
Indeno (1,2,3-cd) pyrene	ND		1.84	1.63		mg/kg dry	☼	89	22 - 121
Naphthalene	ND		1.84	1.37		mg/kg dry	☼	74	10 - 120
Phenanthrene	ND		1.84	1.44		mg/kg dry	☼	79	21 - 122
Pyrene	ND		1.84	1.46		mg/kg dry	☼	79	20 - 123
1-Methylnaphthalene	ND		1.84	1.04		mg/kg dry	☼	57	10 - 120
2-Methylnaphthalene	ND		1.84	1.24		mg/kg dry	☼	67	13 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Terphenyl-d14	80		18 - 120
2-Fluorobiphenyl	63		14 - 120
Nitrobenzene-d5	61		17 - 120

Lab Sample ID: 11K6276-MSD1

Matrix: Soil

Analysis Batch: 11K6276

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11K6276\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.84	1.67		mg/kg dry	☼	91	19 - 120	25	50
Acenaphthylene	ND		1.84	1.67		mg/kg dry	☼	91	25 - 120	27	50
Anthracene	ND		1.84	1.87		mg/kg dry	☼	101	28 - 125	24	49
Benzo (a) anthracene	ND		1.84	1.82		mg/kg dry	☼	99	23 - 120	23	50
Benzo (a) pyrene	ND		1.84	2.06		mg/kg dry	☼	112	15 - 128	22	50
Benzo (b) fluoranthene	ND		1.84	2.16		mg/kg dry	☼	117	12 - 133	19	50
Benzo (g,h,i) perylene	ND		1.84	2.00		mg/kg dry	☼	108	22 - 120	21	50
Benzo (k) fluoranthene	ND		1.84	1.74		mg/kg dry	☼	95	28 - 120	28	45
Chrysene	ND		1.84	1.85		mg/kg dry	☼	100	20 - 120	22	49
Dibenz (a,h) anthracene	ND		1.84	2.04		mg/kg dry	☼	111	12 - 128	22	50
Fluoranthene	ND		1.84	1.85		mg/kg dry	☼	100	10 - 143	24	50
Fluorene	ND		1.84	1.89		mg/kg dry	☼	102	20 - 120	25	50
Indeno (1,2,3-cd) pyrene	ND		1.84	2.02		mg/kg dry	☼	109	22 - 121	21	50
Naphthalene	ND		1.84	1.72		mg/kg dry	☼	93	10 - 120	23	50
Phenanthrene	ND		1.84	1.82		mg/kg dry	☼	99	21 - 122	23	50
Pyrene	ND		1.84	1.82		mg/kg dry	☼	99	20 - 123	22	50
1-Methylnaphthalene	ND		1.84	1.27		mg/kg dry	☼	69	10 - 120	20	50
2-Methylnaphthalene	ND		1.84	1.53		mg/kg dry	☼	83	13 - 120	21	50

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Terphenyl-d14	98		18 - 120
2-Fluorobiphenyl	81		14 - 120
Nitrobenzene-d5	76		17 - 120

## QC Sample Results

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

TestAmerica Job ID: NUK3501

### Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11K6756-DUP1

Matrix: Soil

Analysis Batch: 11K6756

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 11K6756\_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
% Dry Solids	88.3		86.5		%		2	20



## QC Association Summary

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

TestAmerica Job ID: NUK3501

### GCMS Volatiles

#### Analysis Batch: U021078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6689-BLK1	Method Blank	Total	Soil	SW846 8260B	11K6689_P
11K6689-BLK2	Method Blank	Total	Soil	SW846 8260B	11K6689_P
11K6689-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K6689_P
11K6689-MS1	Matrix Spike	Total	Soil	SW846 8260B	11K6689_P
11K6689-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11K6689_P
NUK3501-01	324 Ash	Total	Soil	SW846 8260B	11K6689_P
NUK3501-02	338 Ash-1	Total	Soil	SW846 8260B	11K6689_P

#### Analysis Batch: U021104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6686-BLK1	Method Blank	Total	Soil	SW846 8260B	11K6686_P
11K6686-BLK2	Method Blank	Total	Soil	SW846 8260B	11K6686_P
11K6686-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11K6686_P
11K6686-BSD1	Lab Control Sample Dup	Total	Soil	SW846 8260B	11K6686_P
11K6686-MS1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P
11K6686-MSD1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P
NUK3501-01 - RE1	324 Ash	Total	Soil	SW846 8260B	11K6686_P
NUK3501-03 - RE1	338 Ash-2	Total	Soil	SW846 8260B	11K6686_P

#### Prep Batch: 11K6686\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6686-BLK1	Method Blank	Total	Soil	EPA 5035	
11K6686-BLK2	Method Blank	Total	Soil	EPA 5035	
11K6686-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K6686-BSD1	Lab Control Sample Dup	Total	Soil	EPA 5035	
11K6686-MS1	338 Ash-2	Total	Soil	EPA 5035	
11K6686-MSD1	338 Ash-2	Total	Soil	EPA 5035	
NUK3501-01 - RE1	324 Ash	Total	Soil	EPA 5035	
NUK3501-03 - RE1	338 Ash-2	Total	Soil	EPA 5035	

#### Prep Batch: 11K6689\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6689-BLK1	Method Blank	Total	Soil	EPA 5035	
11K6689-BLK2	Method Blank	Total	Soil	EPA 5035	
11K6689-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11K6689-MS1	Matrix Spike	Total	Soil	EPA 5035	
11K6689-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NUK3501-01	324 Ash	Total	Soil	EPA 5035	
NUK3501-02	338 Ash-1	Total	Soil	EPA 5035	

### GCMS Semivolatiles

#### Analysis Batch: 11K6276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6276-BLK1	Method Blank	Total	Soil	SW846 8270D	11K6276_P
11K6276-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11K6276_P
11K6276-MS1	Matrix Spike	Total	Soil	SW846 8270D	11K6276_P
11K6276-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	11K6276_P
NUK3501-01	324 Ash	Total	Soil	SW846 8270D	11K6276_P
NUK3501-02	338 Ash-1	Total	Soil	SW846 8270D	11K6276_P
NUK3501-03	338 Ash-2	Total	Soil	SW846 8270D	11K6276_P

## QC Association Summary

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

TestAmerica Job ID: NUK3501

### GCMS Semivolatiles (Continued)

#### Analysis Batch: U020866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUK3501-01 - RE1	324 Ash	Total	Soil	SW846 8270D	11K6276_P

#### Prep Batch: 11K6276\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6276-BLK1	Method Blank	Total	Soil	EPA 3550C	
11K6276-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11K6276-MS1	Matrix Spike	Total	Soil	EPA 3550C	
11K6276-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550C	
NUK3501-01	324 Ash	Total	Soil	EPA 3550C	
NUK3501-01 - RE1	324 Ash	Total	Soil	EPA 3550C	
NUK3501-02	338 Ash-1	Total	Soil	EPA 3550C	
NUK3501-03	338 Ash-2	Total	Soil	EPA 3550C	

### Extractions

#### Analysis Batch: 11K6756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6756-DUP1	Duplicate	Total	Soil	SW-846	11K6756_P
NUK3501-01	324 Ash	Total	Soil	SW-846	11K6756_P
NUK3501-02	338 Ash-1	Total	Soil	SW-846	11K6756_P
NUK3501-03	338 Ash-2	Total	Soil	SW-846	11K6756_P

#### Prep Batch: 11K6756\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11K6756-DUP1	Duplicate	Total	Soil	% Solids	
NUK3501-01	324 Ash	Total	Soil	% Solids	
NUK3501-02	338 Ash-1	Total	Soil	% Solids	
NUK3501-03	338 Ash-2	Total	Soil	% Solids	



## Lab Chronicle

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

TestAmerica Job ID: NUK3501

### Client Sample ID: 324 Ash

Lab Sample ID: NUK3501-01

Date Collected: 11/21/11 13:15

Matrix: Soil

Date Received: 11/26/11 07:50

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.773	11K6689_P	11/21/11 13:15	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U021078	11/28/11 20:06	KKK H	TAL NSH
Total	Prep	EPA 5035	RE1	0.833	11K6686_P	11/21/11 13:15	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	50.0	U021104	11/29/11 16:45	KKK H	TAL NSH
Total	Prep	EPA 3550C		0.985	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K6276	11/28/11 21:42	BES	TAL NSH
Total	Prep	EPA 3550C	RE1	0.985	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D	RE1	20.0	U020866	11/29/11 11:45	BES	TAL NSH
Total	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	TAL NSH

### Client Sample ID: 338 Ash-1

Lab Sample ID: NUK3501-02

Date Collected: 11/22/11 14:00

Matrix: Soil

Date Received: 11/26/11 07:50

Percent Solids: 77.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		0.810	11K6689_P	11/22/11 14:00	AAN	TAL NSH
Total	Analysis	SW846 8260B		1.00	U021078	11/28/11 20:37	KKK H	TAL NSH
Total	Prep	EPA 3550C		0.981	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K6276	11/28/11 22:02	BES	TAL NSH
Total	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	TAL NSH

### Client Sample ID: 338 Ash-2

Lab Sample ID: NUK3501-03

Date Collected: 11/23/11 10:45

Matrix: Soil

Date Received: 11/26/11 07:50

Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.831	11K6686_P	11/23/11 10:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	U021104	11/29/11 15:43	KKK H	TAL NSH
Total	Prep	EPA 3550C		0.986	11K6276_P	11/28/11 12:25	RCH2	TAL NSH
Total	Analysis	SW846 8270D		1.00	11K6276	11/28/11 22:23	BES	TAL NSH
Total	Prep	% Solids		1.00	11K6756_P	11/30/11 12:38	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11K6756	12/01/11 11:44	RRS	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: NUK3501

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: NUK3501

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		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	California	NELAC	9	1168CA
TestAmerica Nashville	Canada (CALA)	Canada (CALA)		3744
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
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	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		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
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.



**THE LEADER IN ENVIRONMENTAL TESTING**

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615-726-0177  
Toll Free: 800-765-0980  
Fax: 615-726-3404

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

**Client Name/Account #:** EEG - SBG # 2449  
**Address:** 10179 Highway 78

City/State/Zip: Ladson, SC 29456

**Project Manager:** Tom McElwee email: [tomelwee@eeginc.net](mailto:tomelwee@eeginc.net)

Telephone Number: 843.412.2097

Fax No.: 843-879-0401

Sampler Name: (Print) JEAN SHAW  
Sampler Signature: [Signature]

Site State: SC  
 PO#: 1027  
 TA Quote #:   
 Project ID: Laurel Bay Housing Project  
 Project #:

Compliance Monitoring?	Yes _____	No _____
Enforcement Action?	Yes _____	No _____

Project ID: Laurel Bay Housing Project  
Project #: \_\_\_\_\_

Project #:

Reservante

Analyze For:

RUSH TAT (Pre-Schedule)

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO <sub>3</sub> (Red Label)	HCl (Blue Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other ( Specify )	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Naph - 82608	PAH - 8270D	NUK3501	12/12/11 23:59	RUSH TAT (Pro-Schedule)
324 Ash	11/21/11	1315	5	X															X		X	X			
338 Ash-1	11/22/11	1400	5	X															X		X	X			
338 Ash-2	11/23/11	1045	5	X															X		X	X			

**Special instructions:**

#### **Method of Shipments:**

**FEDER**

**Laboratory Comments:**  
Temperature Upon Receipt 1.7  
VOCs Free of Headspace?

3

Relinquished by: 

Date 11/25

Time	1:00
Time	

Received by: Fader  
Received by TestAmerica: [Signature]

Date	
Date	

Time

07:50

ATTACHMENT A

# UST Certificate of Disposal

## CONTRACTOR

Small Business Group, Inc.  
10179 Highway 78  
Ladson, SC 29456

TEL (843) 879-0403  
FAX (843) 879-0401

## TANK ID & LOCATION

UST 338Ash-1; 338 Ash Street, Laurel Bay Housing Area, MCAS Beaufort, S.C.

---

## DISPOSAL LOCATION

Coastal Auto Salvage Co., Inc.  
130 Laurel Bay Road  
Beaufort, S.C. 29906

### TYPE OF TANK

### SIZE (GAL)

Steel

280

---

## CLEANING/DISPOSAL METHOD

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

## DISPOSAL CERTIFICATION

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

TC L. Z. Doe / 1/19/12  
(Name) (Date)





# 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 00316827	
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	
G E N E R A T O R		11. Description of Waste Materials		12. Containers		13. Total Quantity	
		a. HEATING OIL TANKS FILLED WITH SAND WM Profile # 102655SC		No. Type		14. Unit Wt./Vol.	
		b. WM Profile #					
		c. WM Profile #					
		d. WM Profile #					
J. Additional Descriptions for Materials Listed Above		K. Disposal Location		Cell		Level	
15. Special Handling Instructions and Additional Information 1) 305 Ash ✓ 2) 338 Ash-2 ✓ 3) 328 Ash-2 ✓ 4) 370 Aspen ✓ 5) 383 Aspen-2 ✓		Purchase Order #		EMERGENCY CONTACT / PHONE NO.:		Grid	
16. GENERATOR'S CERTIFICATE: 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 W.G. Dumas		Signature "On behalf of"		Month Day Year 12 7 11	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name James Baldwin		Signature James Baldwin		Month Day Year 1 4 12	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month Day Year	
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 Tom Cofield		Signature Tom Cofield	
				Month Day Year 1 4 12			

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

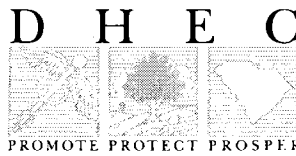
Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

## **Appendix C**

### **Regulatory Correspondence**



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

May 15, 2014

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 above 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](mailto: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)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

**Attachment to:** Krieg to Drawdy  
**Subject:** NFA  
**Dated** 5/15/2014

**Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks)**

212 Balsam	503 Laurel Bay
219 Balsam	508 Laurel Bay
260 Beech Tank 1	510 Laurel Bay
260 Beech Tank 2	523 Laurel Bay
267 Birch	525 Laurel Bay
287 Birch	529 Laurel Bay
302 Ash	533 Laurel Bay
305 Ash	537 Laurel Bay
334 Ash	556 Dahlia
338 Ash Tank 1	557 Dahlia
338 Ash Tank 2	559 Dahlia
361 Aspen	562 Dahlia
371 Aspen	568 Dahlia
372 Aspen Tank 1	581 Aster
372 Aspen Tank 2	582 Aster
375 Aspen	584 Aster
385 Aspen	602 Dahlia
403 Elderberry	607 Dahlia
407 Elderberry	614 Dahlia
411 Elderberry	616 Dahlia
414 Elderberry	619 Dahlia
415 Elderberry	625 Dahlia
421 Elderberry	629 Dahlia
427 Elderberry	631 Dahlia
428 Elderberry	634 Dahlia
431 Elderberry	660 Camellia
455 Elderberry	661 Camellia
484 Laurel Bay	666 Camellia
490 Laurel Bay	669 Camellia
502 Laurel Bay	672 Camellia



Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

674 Camellia	880 Cobia
677 Camellia	890 Cobia
679 Camellia	892 Cobia
686 Camellia	900 Barracuda
690 Camellia	906 Barracuda
698 Abelia	911 Barracuda
700 Bluebell	912 Barracuda
704 Bluebell	917 Barracuda
705 Bluebell	919 Barracuda
708 Bluebell	928 Albacore
710 Bluebell	1024 Foxglove
711 Bluebell	1028 Foxglove
714 Bluebell	1029 Foxglove
715 Bluebell	1038 Iris
726 Bluebell	1049 Gardenia
728 Bluebell	1079 Heather
731 Bluebell	1103 Iris
734 Bluebell	1122 Iris
759 Althea	1136 Iris
761 Althea	1173 Bobwhite
773 Althea	1200 Cardinal
778 Laurel Bay	1221 Cardinal
807 Azalea	1238 Dove
814 Azalea	1241 Dove
815 Azalea	1242 Dove
818 Azalea	1248 Dove
820 Azalea	1262 Dove
821 Azalea	1265 Dove
831 Azalea	1267 Dove
832 Azalea	1289 Eagle
834 Azalea	1298 Eagle
835 Azalea	1300 Eagle
841 Azalea	1303 Eagle
853 Dolphin	1304 Eagle
858 Dolphin	1315 Albatross
869 Cobia	1316 Albatross
874 Cobia	1320 Albatross
875 Cobia	1338 Albatross

Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

1340 Albatross	
1342 Albatross	
1344 Cardinal	
1345 Cardinal	
1349 Cardinal	
1355 Cardinal	
1366 Cardinal	
1374 Dove	
1375 Dove	
1415 Albatross	