SUMMARY REPORT
304 CAMELLIA DRIVE (FORMERLY 683 CAMELLIA DRIVE)
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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Appendices

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 304 Camellia Drive (Formerly 683 Camellia Drive). 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 304 Camellia Drive (Formerly 683 Camellia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 683 Camellia Drive* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On August 3, 2011, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 304 Camellia Drive (Formerly 683 Camellia Drive). 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 6'6" 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 304 Camellia Drive (Formerly 683 Camellia Drive) 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 304 Camellia Drive (Formerly 683 Camellia Drive). 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 – 683 Camellia Drive, Laurel Bay Military Housing Area*, December 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
304 Camellia Drive (Formerly 683 Camellia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [(1)]	Results Sample Collected 08/03/11
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.

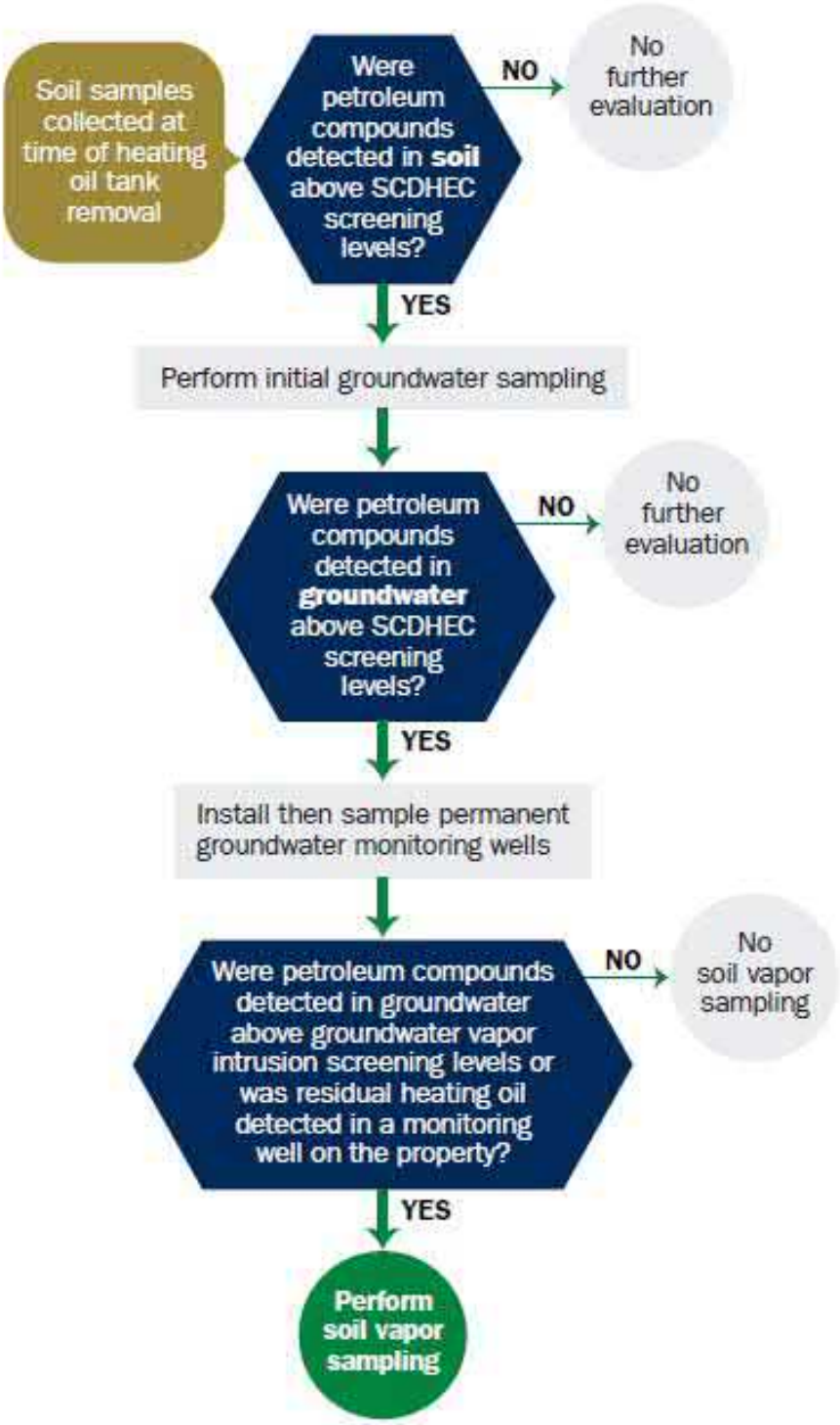
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A

Multi-Media Selection Process for LBMH

CDM - AECOM
Multimedia Joint Venture



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

CDM - AECOM
Multimedia Joint Venture

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received

State Use Only

RECEIVED

DEC 0 8 2011

SC DHEC - Bureau of
Land & Waste Management

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

683 Camellia Drive, 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

683Camellia				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'6"				
No				
No				
Removed				
8/3/11				
Yes				
Yes				

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 683Camellia 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)
UST 683Camellia 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 and pitting were found throughout the tank.

VII. PIPING INFORMATION

683Camellia				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

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.

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
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		X	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.)		X	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		X	
D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal:		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		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 #
683 Camellia	Excav at fill end	Soil	Sandy	6'6"	8/3/11 1215 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? 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)

SBG-EEG, Inc.

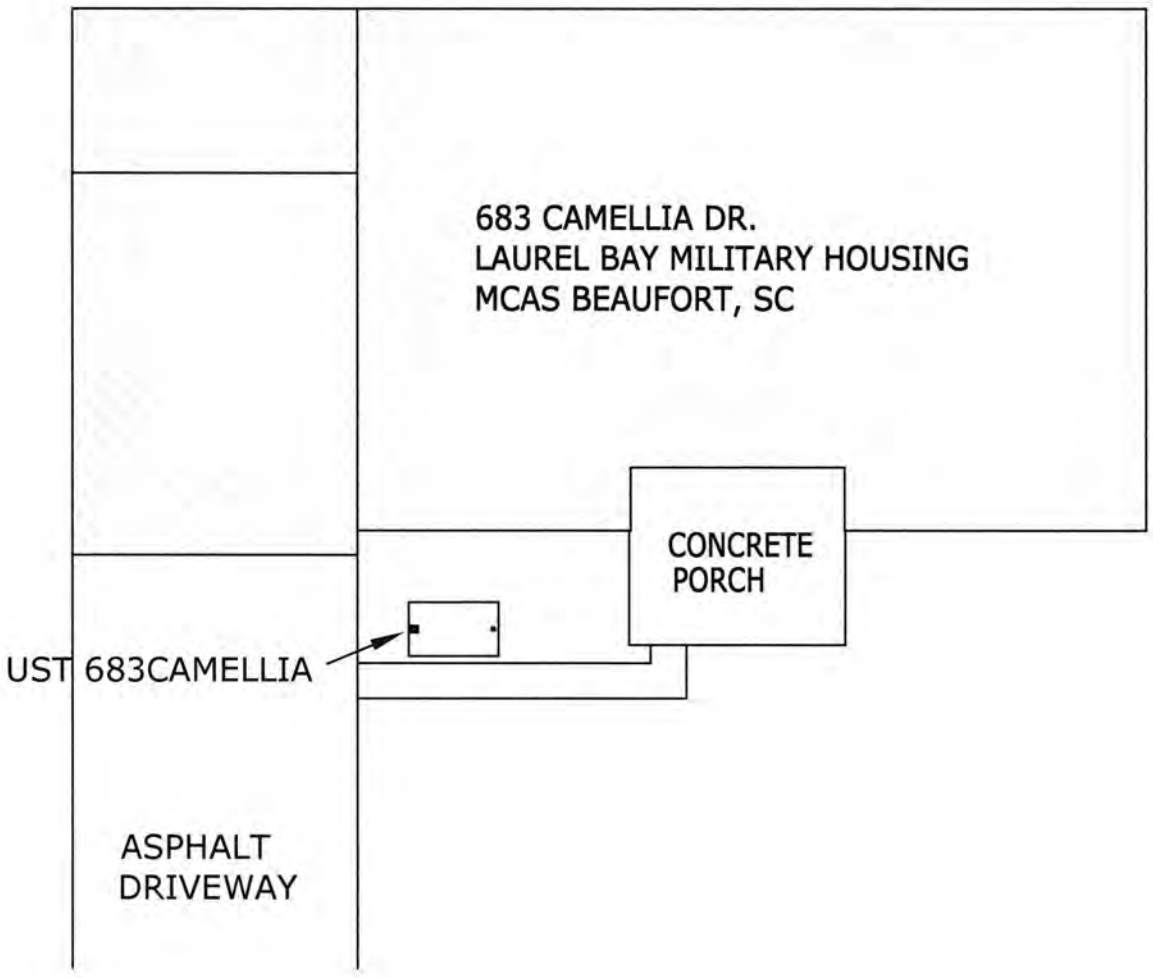
398 E. 5th North Street, Suite C
Summerville SC 29483-6954

Ph. (843) 875-1930

Drawn By: L. DiAsio

Dwg Date: SEPT 2011

FIGURE 1: LOCATION MAP
683 CAMELLIA DR.
LAUREL BAY, BEAUFORT SC



GRAPHIC SCALE

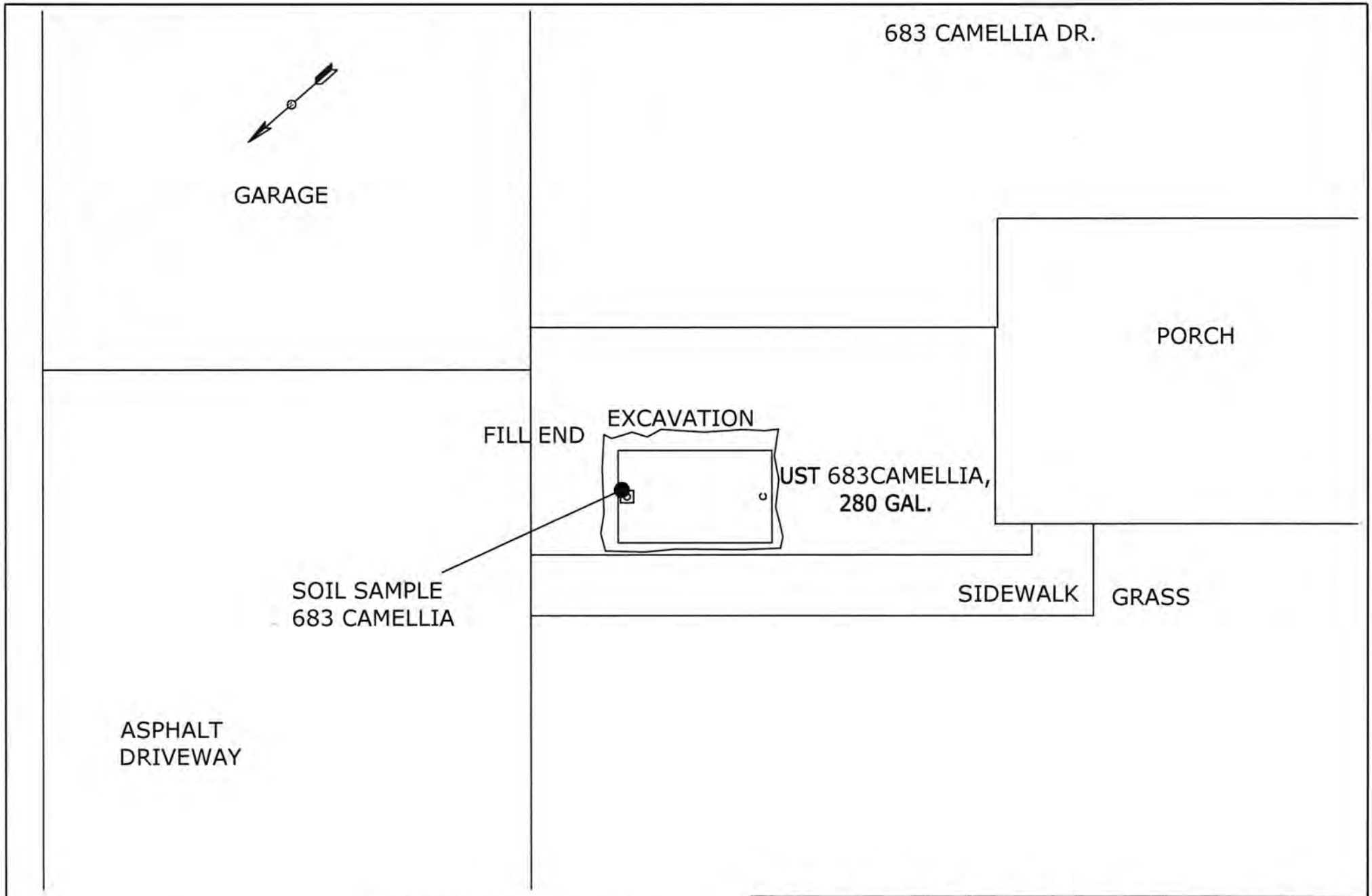
0 5' 10' 20'

SBG-EEG

398 E. 5 NORTH ST., SUITE C
SUMMERVILLE, SC
29483-6954

FIGURE 2 SITE MAP
683 CAMELLIA DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE SEPT 2011



SBG-EEG
398 E. 5 NORTH ST., SUITE C
SUMMERVILLE, SC
29483-6954

FIGURE 3 UST SAMPLE LOCATIONS
683 CAMELLIA DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE SEPT 2011

Picture 1: Location of UST 683Camellia.

Picture 2: UST 683Camellia excavation after tank removed.

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	683Camellia						
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: NUH1002
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:
08/19/2011 06:33:42 PM

Ken A. Hayes
Senior Project Manager
ken.hayes@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.

Table of Contents

Sample Summary

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

TestAmerica Job ID: NUH1002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUH1002-01	683 Camellia	Soil	08/03/11 12:15	08/06/11 08:25

Definitions/Glossary

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

TestAmerica Job ID: NUH1002

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit 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 ID: 683 Camellia

Date Collected: 08/03/11 12:15
Date Received: 08/06/11 08:25

Lab Sample ID: NUH1002-01

Matrix: Soil
Percent Solids: 93.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00229	0.00126	mg/kg dry	☼	08/03/11 12:15	08/10/11 04:51	1.00
Ethylbenzene	ND		0.00229	0.00112	mg/kg dry	☼	08/03/11 12:15	08/10/11 04:51	1.00
Naphthalene	ND		0.00573	0.00195	mg/kg dry	☼	08/03/11 12:15	08/10/11 04:51	1.00
Toluene	ND		0.00229	0.00102	mg/kg dry	☼	08/03/11 12:15	08/10/11 04:51	1.00
Xylenes, total	ND		0.00573	0.00218	mg/kg dry	☼	08/03/11 12:15	08/10/11 04:51	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*100*		*67 - 138*	*08/03/11 12:15*	*08/10/11 04:51*	*1.00*
Dibromofluoromethane	*96*		*75 - 125*	*08/03/11 12:15*	*08/10/11 04:51*	*1.00*
Toluene-d8	*111*		*76 - 129*	*08/03/11 12:15*	*08/10/11 04:51*	*1.00*
4-Bromofluorobenzene	*111*		*67 - 147*	*08/03/11 12:15*	*08/10/11 04:51*	*1.00*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0699	0.0146	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Acenaphthylene	ND		0.0699	0.0209	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Anthracene	ND		0.0699	0.00939	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Benzo (a) anthracene	ND		0.0699	0.0115	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Benzo (a) pyrene	ND		0.0699	0.00834	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Benzo (b) fluoranthene	ND		0.0699	0.0396	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Benzo (g,h,i) perylene	ND		0.0699	0.00939	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Benzo (k) fluoranthene	ND		0.0699	0.0386	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Chrysene	ND		0.0699	0.0323	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Dibenz (a,h) anthracene	ND		0.0699	0.0156	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Fluoranthene	ND		0.0699	0.0115	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Fluorene	ND		0.0699	0.0209	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0699	0.0323	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Naphthalene	ND		0.0699	0.0146	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Phenanthrene	ND		0.0699	0.0104	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
Pyrene	ND		0.0699	0.0240	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
1-Methylnaphthalene	ND		0.0699	0.0125	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00
2-Methylnaphthalene	ND		0.0699	0.0219	mg/kg dry	☼	08/15/11 11:05	08/15/11 18:00	1.00

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 120*	*08/15/11 11:05*	*08/15/11 18:00*	*1.00*
2-Fluorobiphenyl	*67*		*14 - 120*	*08/15/11 11:05*	*08/15/11 18:00*	*1.00*
Nitrobenzene-d5	*76*		*17 - 120*	*08/15/11 11:05*	*08/15/11 18:00*	*1.00*

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	**93.5**		0.500	0.500	%		08/15/11 13:37	08/16/11 12:30	1.00

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

Lab Sample ID: 11H1029-BLK1
Matrix: Soil
Analysis Batch: U014158

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11H1029_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		08/04/11 13:56	08/09/11 21:20	1.00
Ethylbenzene	ND		0.00200	0.000980	mg/kg wet		08/04/11 13:56	08/09/11 21:20	1.00
Naphthalene	ND		0.00500	0.00170	mg/kg wet		08/04/11 13:56	08/09/11 21:20	1.00
Toluene	ND		0.00200	0.000890	mg/kg wet		08/04/11 13:56	08/09/11 21:20	1.00
Xylenes, total	ND		0.00500	0.00190	mg/kg wet		08/04/11 13:56	08/09/11 21:20	1.00

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*103*		*67 - 138*	*08/04/11 13:56*	*08/09/11 21:20*	*1.00*
Dibromofluoromethane	*97*		*75 - 125*	*08/04/11 13:56*	*08/09/11 21:20*	*1.00*
Toluene-d8	*104*		*76 - 129*	*08/04/11 13:56*	*08/09/11 21:20*	*1.00*
4-Bromofluorobenzene	*112*		*67 - 147*	*08/04/11 13:56*	*08/09/11 21:20*	*1.00*

Lab Sample ID: 11H1029-BLK2
Matrix: Soil
Analysis Batch: U014158

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11H1029_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		08/04/11 13:56	08/09/11 20:49	50.0
Ethylbenzene	ND		0.100	0.0490	mg/kg wet		08/04/11 13:56	08/09/11 20:49	50.0
Naphthalene	ND		0.250	0.0850	mg/kg wet		08/04/11 13:56	08/09/11 20:49	50.0
Toluene	ND		0.100	0.0445	mg/kg wet		08/04/11 13:56	08/09/11 20:49	50.0
Xylenes, total	ND		0.250	0.0950	mg/kg wet		08/04/11 13:56	08/09/11 20:49	50.0

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4	*93*		*67 - 138*	*08/04/11 13:56*	*08/09/11 20:49*	*50.0*
Dibromofluoromethane	*94*		*75 - 125*	*08/04/11 13:56*	*08/09/11 20:49*	*50.0*
Toluene-d8	*109*		*76 - 129*	*08/04/11 13:56*	*08/09/11 20:49*	*50.0*
4-Bromofluorobenzene	*111*		*67 - 147*	*08/04/11 13:56*	*08/09/11 20:49*	*50.0*

Lab Sample ID: 11H1029-BS1
Matrix: Soil
Analysis Batch: U014158

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11H1029_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	50.0	48.1		ug/kg		96	78 - 126
Ethylbenzene	50.0	54.7		ug/kg		109	79 - 130
Naphthalene	50.0	47.8		ug/kg		96	72 - 150
Toluene	50.0	49.1		ug/kg		98	76 - 126
Xylenes, total	150	165		ug/kg		110	80 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4	*98*		*67 - 138*
Dibromofluoromethane	*95*		*75 - 125*
Toluene-d8	*108*		*76 - 129*
4-Bromofluorobenzene	*112*		*67 - 147*

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

Lab Sample ID: 11H1029-MS1
Matrix: Soil
Analysis Batch: U014158

Client Sample ID: Matrix Spike
Prep Type: Total
Prep Batch: 11H1029_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	0.0207		0.0441	0.0429		mg/kg wet		50	42 - 141
Ethylbenzene	0.0351		0.0441	0.0428	M8	mg/kg wet		17	21 - 165
Naphthalene	0.0868		0.0441	0.0662	M8	mg/kg wet		-47	10 - 160
Toluene	0.00249		0.0441	0.0385		mg/kg wet		82	45 - 145
Xylenes, total	0.0211		0.132	0.125		mg/kg wet		78	31 - 159

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1,2-Dichloroethane-d4	*96*		*67 - 138*
Dibromofluoromethane	*94*		*75 - 125*
Toluene-d8	*111*		*76 - 129*
4-Bromofluorobenzene	*118*		*67 - 147*

Lab Sample ID: 11H1029-MSD1
Matrix: Soil
Analysis Batch: U014158

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total
Prep Batch: 11H1029_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	0.0207		0.0461	0.0450		mg/kg wet		53	42 - 141	5	50
Ethylbenzene	0.0351		0.0461	0.0436	M8	mg/kg wet		18	21 - 165	2	50
Naphthalene	0.0868		0.0461	0.0598	M8	mg/kg wet		-58	10 - 160	10	50
Toluene	0.00249		0.0461	0.0403		mg/kg wet		82	45 - 145	5	50
Xylenes, total	0.0211		0.138	0.128		mg/kg wet		77	31 - 159	2	50

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1,2-Dichloroethane-d4	*98*		*67 - 138*
Dibromofluoromethane	*95*		*75 - 125*
Toluene-d8	*113*		*76 - 129*
4-Bromofluorobenzene	*116*		*67 - 147*

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

Lab Sample ID: 11H3481-BLK1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0140	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Acenaphthylene	ND		0.0670	0.0200	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Anthracene	ND		0.0670	0.00900	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Benzo (a) anthracene	ND		0.0670	0.0110	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Benzo (a) pyrene	ND		0.0670	0.00800	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Benzo (b) fluoranthene	ND		0.0670	0.0380	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Benzo (g,h,i) perylene	ND		0.0670	0.00900	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Benzo (k) fluoranthene	ND		0.0670	0.0370	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Chrysene	ND		0.0670	0.0310	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Dibenz (a,h) anthracene	ND		0.0670	0.0150	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Fluoranthene	ND		0.0670	0.0110	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Fluorene	ND		0.0670	0.0200	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0310	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00

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

Lab Sample ID: 11H3481-BLK1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0670	0.0140	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Phenanthrene	ND		0.0670	0.0100	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
Pyrene	ND		0.0670	0.0230	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
1-Methylnaphthalene	ND		0.0670	0.0120	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00
2-Methylnaphthalene	ND		0.0670	0.0210	mg/kg wet		08/15/11 11:05	08/15/11 16:17	1.00

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 120*	*08/15/11 11:05*	*08/15/11 16:17*	*1.00*
2-Fluorobiphenyl	*83*		*14 - 120*	*08/15/11 11:05*	*08/15/11 16:17*	*1.00*
Nitrobenzene-d5	*90*		*17 - 120*	*08/15/11 11:05*	*08/15/11 16:17*	*1.00*

Lab Sample ID: 11H3481-BS1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	1.67	1.51		mg/kg wet		91	49 - 120
Acenaphthylene	1.67	1.56		mg/kg wet		94	52 - 120
Anthracene	1.67	1.63		mg/kg wet		98	58 - 120
Benzo (a) anthracene	1.67	1.62		mg/kg wet		97	57 - 120
Benzo (a) pyrene	1.67	1.74		mg/kg wet		105	55 - 120
Benzo (b) fluoranthene	1.67	1.54		mg/kg wet		92	51 - 123
Benzo (g,h,i) perylene	1.67	1.65		mg/kg wet		99	49 - 121
Benzo (k) fluoranthene	1.67	1.44		mg/kg wet		86	42 - 129
Chrysene	1.67	1.52		mg/kg wet		91	55 - 120
Dibenz (a,h) anthracene	1.67	1.71		mg/kg wet		103	50 - 123
Fluoranthene	1.67	1.59		mg/kg wet		95	58 - 120
Fluorene	1.67	1.53		mg/kg wet		92	54 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.69		mg/kg wet		101	50 - 122
Naphthalene	1.67	1.40		mg/kg wet		84	28 - 120
Phenanthrene	1.67	1.56		mg/kg wet		94	56 - 120
Pyrene	1.67	1.60		mg/kg wet		96	56 - 120
1-Methylnaphthalene	1.67	1.05		mg/kg wet		63	36 - 120
2-Methylnaphthalene	1.67	1.29		mg/kg wet		77	36 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*102*		*18 - 120*
2-Fluorobiphenyl	*81*		*14 - 120*
Nitrobenzene-d5	*82*		*17 - 120*

Lab Sample ID: 11H3481-MS1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: 683 Camellia
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	ND		1.76	1.45		mg/kg dry	☼	82	42 - 120
Acenaphthylene	ND		1.76	1.47		mg/kg dry	☼	84	32 - 120
Anthracene	ND		1.76	1.56		mg/kg dry	☼	89	10 - 200
Benzo (a) anthracene	ND		1.76	1.54		mg/kg dry	☼	88	41 - 120

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

Lab Sample ID: 11H3481-MS1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: 683 Camellia
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzo (a) pyrene	ND		1.76	1.67		mg/kg dry	☼	95	33 - 121
Benzo (b) fluoranthene	ND		1.76	1.56		mg/kg dry	☼	89	26 - 137
Benzo (g,h,i) perylene	ND		1.76	1.63		mg/kg dry	☼	93	21 - 124
Benzo (k) fluoranthene	ND		1.76	1.57		mg/kg dry	☼	89	14 - 140
Chrysene	ND		1.76	1.48		mg/kg dry	☼	84	28 - 123
Dibenz (a,h) anthracene	ND		1.76	1.66		mg/kg dry	☼	94	25 - 127
Fluoranthene	ND		1.76	1.54		mg/kg dry	☼	88	38 - 120
Fluorene	ND		1.76	1.45		mg/kg dry	☼	83	41 - 120
Indeno (1,2,3-cd) pyrene	ND		1.76	1.62		mg/kg dry	☼	92	25 - 123
Naphthalene	ND		1.76	1.40		mg/kg dry	☼	80	25 - 120
Phenanthrene	ND		1.76	1.48		mg/kg dry	☼	84	37 - 120
Pyrene	ND		1.76	1.54		mg/kg dry	☼	87	29 - 125
1-Methylnaphthalene	ND		1.76	1.08		mg/kg dry	☼	62	19 - 120
2-Methylnaphthalene	ND		1.76	1.30		mg/kg dry	☼	74	11 - 120

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 120*
2-Fluorobiphenyl	*74*		*14 - 120*
Nitrobenzene-d5	*76*		*17 - 120*

Lab Sample ID: 11H3481-MSD1
Matrix: Soil
Analysis Batch: 11H3481

Client Sample ID: 683 Camellia
Prep Type: Total
Prep Batch: 11H3481_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1.76	1.56		mg/kg dry	☼	89	42 - 120	8	40
Acenaphthylene	ND		1.76	1.61		mg/kg dry	☼	91	32 - 120	9	30
Anthracene	ND		1.76	1.66		mg/kg dry	☼	94	10 - 200	6	50
Benzo (a) anthracene	ND		1.76	1.67		mg/kg dry	☼	95	41 - 120	8	30
Benzo (a) pyrene	ND		1.76	1.72		mg/kg dry	☼	98	33 - 121	3	33
Benzo (b) fluoranthene	ND		1.76	1.61		mg/kg dry	☼	91	26 - 137	3	42
Benzo (g,h,i) perylene	ND		1.76	1.73		mg/kg dry	☼	99	21 - 124	6	32
Benzo (k) fluoranthene	ND		1.76	1.47		mg/kg dry	☼	83	14 - 140	7	39
Chrysene	ND		1.76	1.60		mg/kg dry	☼	91	28 - 123	7	34
Dibenz (a,h) anthracene	ND		1.76	1.80		mg/kg dry	☼	102	25 - 127	8	31
Fluoranthene	ND		1.76	1.65		mg/kg dry	☼	94	38 - 120	7	35
Fluorene	ND		1.76	1.60		mg/kg dry	☼	91	41 - 120	9	37
Indeno (1,2,3-cd) pyrene	ND		1.76	1.75		mg/kg dry	☼	100	25 - 123	7	32
Naphthalene	ND		1.76	1.48		mg/kg dry	☼	84	25 - 120	5	42
Phenanthrene	ND		1.76	1.60		mg/kg dry	☼	91	37 - 120	8	32
Pyrene	ND		1.76	1.68		mg/kg dry	☼	96	29 - 125	9	40
1-Methylnaphthalene	ND		1.76	1.11		mg/kg dry	☼	63	19 - 120	2	45
2-Methylnaphthalene	ND		1.76	1.30		mg/kg dry	☼	74	11 - 120	0.5	50

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Terphenyl-d14	*101*		*18 - 120*
2-Fluorobiphenyl	*78*		*14 - 120*
Nitrobenzene-d5	*77*		*17 - 120*

QC Sample Results

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

TestAmerica Job ID: NUH1002

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 11H3510-DUP1
Matrix: Soil
Analysis Batch: 11H3510

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 11H3510_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
% Dry Solids	82.1			84.4		%				3	20

QC Association Summary

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

TestAmerica Job ID: NUH1002

GCMS Volatiles

Analysis Batch: U014158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H1029-BS1	Lab Control Sample	Total	Soil	SW846 8260B	11H1029_P
11H1029-BLK2	Method Blank	Total	Soil	SW846 8260B	11H1029_P
11H1029-BLK1	Method Blank	Total	Soil	SW846 8260B	11H1029_P
NUH1002-01	683 Camellia	Total	Soil	SW846 8260B	11H1029_P
11H1029-MS1	Matrix Spike	Total	Soil	SW846 8260B	11H1029_P
11H1029-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	11H1029_P

Prep Batch: 11H1029_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H1029-BS1	Lab Control Sample	Total	Soil	EPA 5035	
11H1029-BLK2	Method Blank	Total	Soil	EPA 5035	
11H1029-BLK1	Method Blank	Total	Soil	EPA 5035	
NUH1002-01	683 Camellia	Total	Soil	EPA 5035	
11H1029-MS1	Matrix Spike	Total	Soil	EPA 5035	
11H1029-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 11H3481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H3481-BLK1	Method Blank	Total	Soil	SW846 8270D	11H3481_P
11H3481-BS1	Lab Control Sample	Total	Soil	SW846 8270D	11H3481_P
11H3481-MS1	683 Camellia	Total	Soil	SW846 8270D	11H3481_P
11H3481-MSD1	683 Camellia	Total	Soil	SW846 8270D	11H3481_P
NUH1002-01 - RE1	683 Camellia	Total	Soil	SW846 8270D	11H3481_P

Prep Batch: 11H3481_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H3481-BLK1	Method Blank	Total	Soil	EPA 3550C	
11H3481-BS1	Lab Control Sample	Total	Soil	EPA 3550C	
11H3481-MS1	683 Camellia	Total	Soil	EPA 3550C	
11H3481-MSD1	683 Camellia	Total	Soil	EPA 3550C	
NUH1002-01 - RE1	683 Camellia	Total	Soil	EPA 3550C	

Extractions

Analysis Batch: 11H3510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H3510-DUP1	Duplicate	Total	Soil	SW-846	11H3510_P
NUH1002-01	683 Camellia	Total	Soil	SW-846	11H3510_P

Prep Batch: 11H3510_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11H3510-DUP1	Duplicate	Total	Soil	% Solids	
NUH1002-01	683 Camellia	Total	Soil	% Solids	

Lab Chronicle

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

TestAmerica Job ID: NUH1002

Client Sample ID: 683 Camellia
Date Collected: 08/03/11 12:15
Date Received: 08/06/11 08:25

Lab Sample ID: NUH1002-01
Matrix: Soil
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5035		1.07	11H1029_P	08/03/11 12:15	TSP	TAL NSH
Total	Analysis	SW846 8260B		1.00	U014158	08/10/11 04:51	KXC	TAL NSH
Total	Prep	EPA 3550C	RE1	0.975	11H3481_P	08/15/11 11:05	CAG	TAL NSH
Total	Analysis	SW846 8270D	RE1	1.00	11H3481	08/15/11 18:00	BES	TAL NSH
Total	Prep	% Solids		1.00	11H3510_P	08/15/11 13:37	RRS	TAL NSH
Total	Analysis	SW-846		1.00	11H3510	08/16/11 12:30	JJR	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: NUH1002

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: NUH1002

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA	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	CALA	CALA		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	LA100011
TestAmerica Nashville	Louisiana	NELAC	6	30613
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		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.

NUH1002

08/22/11 23:59

08/19/2011

Page 16 of 16

TestAmerica

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?

Compliance Monitoring? Yes ____ No ____

Enforcement Action? Yes ____ No ____

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Site State: SC

Project Manager: Tom McElwee email: mcelwee@eeginc.net

PO#: 1027

Telephone Number: 843.412.8097 Fax No.: (843) 879-0401

TA Quote #:

Sampler Name: (Print) Pratt Shaw

Project ID: Laurel Bay Housing Project

Sampler Signature:

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label) Bisulfate	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify) Methanol	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	Analyze For: BTEX + Napth - 8260B	PAH - 8270D	RUSH TAT (Pre-Schedule)
G83 CAMELLIA	8/3/11	1215	5	X					2				2						X		X	X	

Special Instructions:

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
	8/5/11	1000	FEDEX		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
			Paul K. Mill	8/6/11	08:25

Laboratory Comments:

Temperature Upon Receipt: 1.1°C

VOCs Free of Headspace? Y

ATTACHMENT A

WASTE MANAGEMENT

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** 00316816
B. State Generator's ID:

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 No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. HEATING OIL TANKS FILLED WITH SAND WM Profile # 102655SC					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information
USTs From: 2) 6835 Amelia ✓ 4) 127 BANYAN ✓ ~~6) 122 BANYAN~~
D695 Abelia ✓ 3) 130 BANYAN-2 ✓ ~~5) 121 BANYAN~~ 7) 131 BANYAN

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

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.
Entered 10/10/11

Printed Name	Signature "On behalf of"	Month	Day	Year
W.G. Dukes, J.		09	21	11

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
JAMES BALDWIN	James Baldwin	10	5	11

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
Tom Corfield	Tom Corfield	10	5	11

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

D H E C
PROMOTE PROTECT PROSPER
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)

D H E C
PROMOTE PROTECT PROSPER
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	487Laurel 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	