

SUMMARY REPORT
164 ELDERBERRY DRIVE (FORMERLY 417 ELDERBERRY 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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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 164 Elderberry Drive (Formerly 417 Elderberry 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 164 Elderberry Drive (Formerly 417 Elderberry Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 417 Elderberry Drive* (MCAS Beaufort, 2010). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On November 9, 2009, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the driveway at 164 Elderberry Drive (Formerly 417 Elderberry 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 6'0" bgs and a single soil sample was collected from that

depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 164 Elderberry Drive (Formerly 417 Elderberry 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 164 Elderberry Drive (Formerly 417 Elderberry Drive). This NFA determination was obtained in a letter dated September 9, 2010. SCDHEC's NFA letter is provided in Appendix C.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2010. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 417 Elderberry Drive, Laurel Bay Military Housing Area*, February 2010.

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
164 Elderberry Drive (Formerly 417 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 11/09/09
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 1.0 and 1.1 (SCDHEC, May 2001 and SCDHEC, February 2011) 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

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	
417 Elderberry Drive, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

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.....

417 Elderberry				
Heating oil				
280 gal				
Late 1950s				
Steel				
Unknown				
6'				
No				
No				
Removed				
11/9/09				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 417Elderberry was removed from the ground and disposed of at a
Subtitle "D" landfill. See Attachment "A".
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 417Elderberry had been previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

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.

417 Elderberry				
Steel & Copper				
N/A				
N/A				
Suction				
Yes				
Yes				
No				
Late 1950s				

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

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
417 El- derberry	Excav at fill end	Soil	Sandy	6'	11/09/09 1135 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>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 and water</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

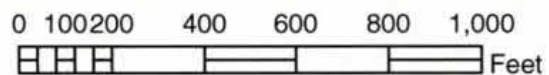
XIII. SITE MAP

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)



417 ELDERBERRY DR.



SBG-EEG, Inc.

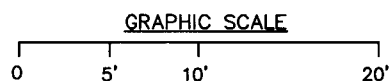
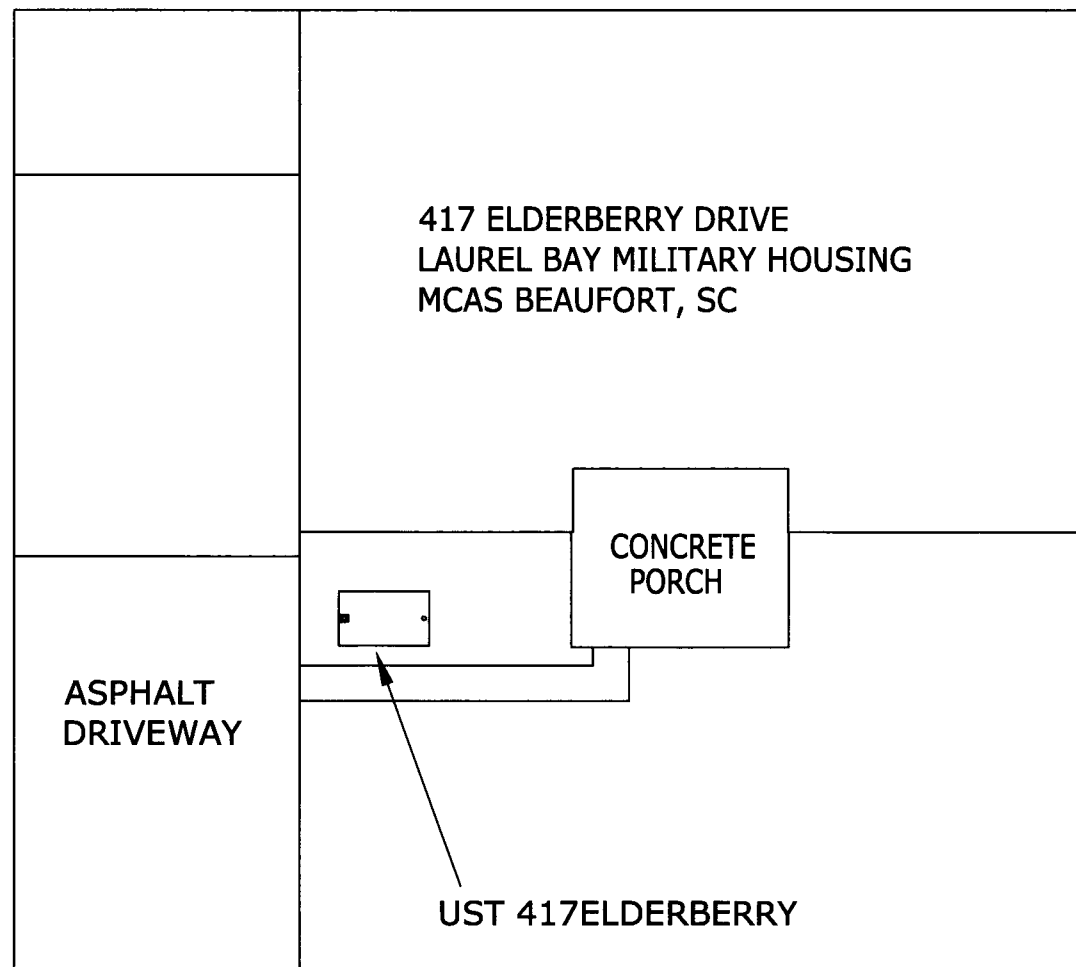
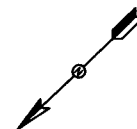
Small Business Group, Inc.
10179 Hwy 78
Ladson, SC 29456

Ph. (843) 879-0400

Drawn By: L. DiAsio

Dwg Date: DEC 2009

FIGURE 1: LOCATION MAP
417 ELDERBERRY DR., LAUREL BAY
MCAS BEAUFORT SC



SBG-EEG

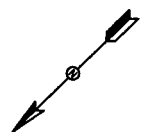
10179 HWY 78
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 2 SITE MAP
417 ELDERBERRY DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE DEC 2009



GARAGE

417 ELDERBERRY DRIVE

PORCH

FILL END EXCAVATION

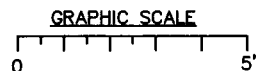
SOIL SAMPLE
417 ELDERBERRY

SIDEWALK

GRASS

ASPHALT
DRIVEWAY

UST 417ELDERBERRY,
280 GAL.



UST 417ELDERBERRY WAS
36" BELOW GRADE.

SBG-EEG

10179 HWY 78
LADSON, SC 29456

ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS
417 ELDERBERRY DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE DEC 2009



Picture 1: Location of UST 417Elderberry.



Picture 2: UST 417Elderberry excavation in progress.

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	417Elderberry						
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)

ATTACHMENT A

November 25, 2009 3:06:37PM

Client: EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn: Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Nbr: [none]
P/O Nbr: 0829
Date Received: 11/13/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
413 Elderberry	NSK1299-01	11/09/09 09:45
417 Elderberry	NSK1299-02	11/09/09 11:35
419 Elderberry	NSK1299-03	11/09/09 15:15

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

South Carolina Certification Number: 84009001

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Ken A. Hayes

Senior Project Manager

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-01 (413 Elderberry - Soil) Sampled: 11/09/09 09:45									
General Chemistry Parameters									
% Dry Solids	95.8		%	0.500	1	11/25/09 09:32	SW-846	BJM	9114131
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00236	1	11/23/09 17:22	SW846 8260B	KxC	9114172
Ethylbenzene	ND		mg/kg dry	0.00236	1	11/23/09 17:22	SW846 8260B	KxC	9114172
Naphthalene	ND		mg/kg dry	0.00589	1	11/23/09 17:22	SW846 8260B	KxC	9114172
Toluene	ND		mg/kg dry	0.00236	1	11/23/09 17:22	SW846 8260B	KxC	9114172
Xylenes, total	ND		mg/kg dry	0.00589	1	11/23/09 17:22	SW846 8260B	KxC	9114172
Surr: 1,2-Dichloroethane-d4 (67-138%)	90 %					11/23/09 17:22	SW846 8260B	KxC	9114172
Surr: Dibromofluoromethane (75-125%)	99 %					11/23/09 17:22	SW846 8260B	KxC	9114172
Surr: Toluene-d8 (76-129%)	93 %					11/23/09 17:22	SW846 8260B	KxC	9114172
Surr: 4-Bromofluorobenzene (67-147%)	90 %					11/23/09 17:22	SW846 8260B	KxC	9114172

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-01 (413 Elderberry - Soil) - cont. Sampled: 11/09/09 09:45										
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	ND		mg/kg dry	0.0230	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Acenaphthylene	ND		mg/kg dry	0.0230	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Anthracene	ND		mg/kg dry	0.0157	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Benzo (a) anthracene	ND		mg/kg dry	0.0136	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Benzo (a) pyrene	ND		mg/kg dry	0.0157	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Benzo (b) fluoranthene	ND		mg/kg dry	0.0177	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0146	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Benzo (k) fluoranthene	ND		mg/kg dry	0.0198	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Chrysene	ND		mg/kg dry	0.0157	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0146	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Fluoranthene	ND		mg/kg dry	0.0146	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Fluorene	ND		mg/kg dry	0.0136	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0125	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Naphthalene	ND		mg/kg dry	0.0209	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Phenanthrene	ND		mg/kg dry	0.0136	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Pyrene	ND		mg/kg dry	0.0125	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
1-Methylnaphthalene	ND		mg/kg dry	0.0177	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
2-Methylnaphthalene	ND		mg/kg dry	0.0188	0.0699	1	11/17/09 21:45	SW846 8270D	RMC	9112389
Surr: Terphenyl-d14 (18-120%)	65 %					1	11/17/09 21:45	SW846 8270D	RMC	9112389
Surr: 2-Fluorobiphenyl (14-120%)	47 %					1	11/17/09 21:45	SW846 8270D	RMC	9112389
Surr: Nitrobenzene-d5 (17-120%)	41 %					1	11/17/09 21:45	SW846 8270D	RMC	9112389

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-02 (417 Elderberry - Soil) Sampled: 11/09/09 11:35									
General Chemistry Parameters									
% Dry Solids	93.6		%	0.500	1	11/25/09 09:32	SW-846	BJM	9114131
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00233	1	11/23/09 17:52	SW846 8260B	KxC	9114172
Ethylbenzene	ND		mg/kg dry	0.00233	1	11/23/09 17:52	SW846 8260B	KxC	9114172
Naphthalene	ND		mg/kg dry	0.00582	1	11/23/09 17:52	SW846 8260B	KxC	9114172
Toluene	ND		mg/kg dry	0.00233	1	11/23/09 17:52	SW846 8260B	KxC	9114172
Xylenes, total	ND		mg/kg dry	0.00582	1	11/23/09 17:52	SW846 8260B	KxC	9114172
Surr: 1,2-Dichloroethane-d4 (67-138%)	91 %					11/23/09 17:52	SW846 8260B	KxC	9114172
Surr: Dibromofluoromethane (75-125%)	97 %					11/23/09 17:52	SW846 8260B	KxC	9114172
Surr: Toluene-d8 (76-129%)	94 %					11/23/09 17:52	SW846 8260B	KxC	9114172
Surr: 4-Bromofluorobenzene (67-147%)	89 %					11/23/09 17:52	SW846 8260B	KxC	9114172

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-02 (417 Elderberry - Soil) - cont. Sampled: 11/09/09 11:35										
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	ND		mg/kg dry	0.0235	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Acenaphthylene	ND		mg/kg dry	0.0235	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Anthracene	ND		mg/kg dry	0.0160	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Benzo (a) anthracene	ND		mg/kg dry	0.0139	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Benzo (a) pyrene	ND		mg/kg dry	0.0160	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Benzo (b) fluoranthene	ND		mg/kg dry	0.0182	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0150	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Benzo (k) fluoranthene	ND		mg/kg dry	0.0203	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Chrysene	ND		mg/kg dry	0.0160	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0150	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Fluoranthene	ND		mg/kg dry	0.0150	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Fluorene	ND		mg/kg dry	0.0139	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0128	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Naphthalene	ND		mg/kg dry	0.0214	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Phenanthrene	ND		mg/kg dry	0.0139	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Pyrene	ND		mg/kg dry	0.0128	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
1-Methylnaphthalene	ND		mg/kg dry	0.0182	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
2-Methylnaphthalene	ND		mg/kg dry	0.0192	0.0716	1	11/18/09 12:19	SW846 8270D	RMC	9112389
Surr: Terphenyl-d14 (18-120%)	57 %					1	11/18/09 12:19	SW846 8270D	RMC	9112389
Surr: 2-Fluorobiphenyl (14-120%)	46 %					1	11/18/09 12:19	SW846 8270D	RMC	9112389
Surr: Nitrobenzene-d5 (17-120%)	42 %					1	11/18/09 12:19	SW846 8270D	RMC	9112389

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-03 (419 Elderberry - Soil) Sampled: 11/09/09 15:15									
General Chemistry Parameters									
% Dry Solids	94.1		%	0.500	1	11/25/09 09:32	SW-846	BJM	9114131
Selected Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00229	1	11/23/09 18:23	SW846 8260B	KxC	9114172
Ethylbenzene	ND		mg/kg dry	0.00229	1	11/23/09 18:23	SW846 8260B	KxC	9114172
Naphthalene	ND		mg/kg dry	0.00571	1	11/23/09 18:23	SW846 8260B	KxC	9114172
Toluene	ND		mg/kg dry	0.00229	1	11/23/09 18:23	SW846 8260B	KxC	9114172
Xylenes, total	ND		mg/kg dry	0.00571	1	11/23/09 18:23	SW846 8260B	KxC	9114172
Surr: 1,2-Dichloroethane-d4 (67-138%)	92 %					11/23/09 18:23	SW846 8260B	KxC	9114172
Surr: Dibromofluoromethane (75-125%)	97 %					11/23/09 18:23	SW846 8260B	KxC	9114172
Surr: Toluene-d8 (76-129%)	94 %					11/23/09 18:23	SW846 8260B	KxC	9114172
Surr: 4-Bromofluorobenzene (67-147%)	89 %					11/23/09 18:23	SW846 8260B	KxC	9114172

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-03 (419 Elderberry - Soil) - cont. Sampled: 11/09/09 15:15										
Polyaromatic Hydrocarbons by EPA 8270D										
Acenaphthene	ND		mg/kg dry	0.0234	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Acenaphthylene	ND		mg/kg dry	0.0234	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Anthracene	ND		mg/kg dry	0.0159	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Benzo (a) anthracene	ND		mg/kg dry	0.0138	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Benzo (a) pyrene	ND		mg/kg dry	0.0159	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Benzo (b) fluoranthene	ND		mg/kg dry	0.0181	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0149	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Benzo (k) fluoranthene	ND		mg/kg dry	0.0202	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Chrysene	ND		mg/kg dry	0.0159	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0149	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Fluoranthene	ND		mg/kg dry	0.0149	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Fluorene	ND		mg/kg dry	0.0138	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0128	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Naphthalene	ND		mg/kg dry	0.0213	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Phenanthrene	ND		mg/kg dry	0.0138	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Pyrene	ND		mg/kg dry	0.0128	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
1-Methylnaphthalene	ND		mg/kg dry	0.0181	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
2-Methylnaphthalene	ND		mg/kg dry	0.0191	0.0712	1	11/18/09 12:42	SW846 8270D	RMC	9112389
Surr: Terphenyl-d14 (18-120%)	62 %					1	11/18/09 12:42	SW846 8270D	RMC	9112389
Surr: 2-Fluorobiphenyl (14-120%)	51 %					1	11/18/09 12:42	SW846 8270D	RMC	9112389
Surr: Nitrobenzene-d5 (17-120%)	46 %					1	11/18/09 12:42	SW846 8270D	RMC	9112389

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270D							
SW846 8270D	9112389	NSK1299-01	30.00	1.00	11/16/09 10:00	TEM	EPA 3550B
SW846 8270D	9112389	NSK1299-02	30.00	1.00	11/16/09 10:00	TEM	EPA 3550B
SW846 8270D	9112389	NSK1299-03	30.00	1.00	11/16/09 10:00	TEM	EPA 3550B
Selected Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	9114172	NSK1299-01	4.43	5.00	11/09/09 09:45	JRL	EPA 5035
SW846 8260B	9114172	NSK1299-02	4.59	5.00	11/09/09 11:35	JRL	EPA 5035
SW846 8260B	9114172	NSK1299-03	4.65	5.00	11/09/09 15:15	JRL	EPA 5035

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B						
9114172-BLK1						
Benzene	<0.000670		mg/kg wet	9114172	9114172-BLK1	11/23/09 15:39
Ethylbenzene	<0.000670		mg/kg wet	9114172	9114172-BLK1	11/23/09 15:39
Naphthalene	<0.00170		mg/kg wet	9114172	9114172-BLK1	11/23/09 15:39
Toluene	<0.000400		mg/kg wet	9114172	9114172-BLK1	11/23/09 15:39
Xylenes, total	<0.00130		mg/kg wet	9114172	9114172-BLK1	11/23/09 15:39
Surrogate: 1,2-Dichloroethane-d4	89%			9114172	9114172-BLK1	11/23/09 15:39
Surrogate: Dibromofluoromethane	96%			9114172	9114172-BLK1	11/23/09 15:39
Surrogate: Toluene-d8	94%			9114172	9114172-BLK1	11/23/09 15:39
Surrogate: 4-Bromofluorobenzene	87%			9114172	9114172-BLK1	11/23/09 15:39
Polyaromatic Hydrocarbons by EPA 8270D						
9112389-BLK1						
Acenaphthene	<0.0220		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Acenaphthylene	<0.0220		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Anthracene	<0.0150		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Benzo (a) anthracene	<0.0130		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Benzo (a) pyrene	<0.0150		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Benzo (b) fluoranthene	<0.0170		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Benzo (g,h,i) perylene	<0.0140		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Benzo (k) fluoranthene	<0.0190		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Chrysene	<0.0150		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Dibenz (a,h) anthracene	<0.0140		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Fluoranthene	<0.0140		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Fluorene	<0.0130		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Indeno (1,2,3-cd) pyrene	<0.0120		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Naphthalene	<0.0200		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Phenanthrene	<0.0130		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Pyrene	<0.0120		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
1-Methylnaphthalene	<0.0170		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
2-Methylnaphthalene	<0.0180		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
Surrogate: Terphenyl-d14	78%			9112389	9112389-BLK1	11/17/09 13:30
Surrogate: 2-Fluorobiphenyl	60%			9112389	9112389-BLK1	11/17/09 13:30
Surrogate: Nitrobenzene-d5	54%			9112389	9112389-BLK1	11/17/09 13:30

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
9114131-DUP1										
% Dry Solids	95.8	95.0		%	0.8	20	9114131	NSK1299-01		11/25/09 09:32

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B								
9114172-BS1								
Benzene	50.0	47.3		ug/kg	95%	78 - 126	9114172	11/23/09 14:07
Ethylbenzene	50.0	48.9		ug/kg	98%	79 - 130	9114172	11/23/09 14:07
Naphthalene	50.0	55.9		ug/kg	112%	72 - 150	9114172	11/23/09 14:07
Toluene	50.0	48.7		ug/kg	97%	76 - 126	9114172	11/23/09 14:07
Xylenes, total	150	139		ug/kg	93%	80 - 130	9114172	11/23/09 14:07
Surrogate: 1,2-Dichloroethane-d4	50.0	47.2			94%	67 - 138	9114172	11/23/09 14:07
Surrogate: Dibromofluoromethane	50.0	47.3			95%	75 - 125	9114172	11/23/09 14:07
Surrogate: Toluene-d8	50.0	47.2			94%	76 - 129	9114172	11/23/09 14:07
Surrogate: 4-Bromofluorobenzene	50.0	44.6			89%	67 - 147	9114172	11/23/09 14:07
Polyaromatic Hydrocarbons by EPA 8270D								
9112389-BS1								
Acenaphthene	1.67	0.995		mg/kg wet	60%	49 - 120	9112389	11/17/09 13:52
Acenaphthylene	1.67	0.984		mg/kg wet	59%	52 - 120	9112389	11/17/09 13:52
Anthracene	1.67	1.20		mg/kg wet	72%	58 - 120	9112389	11/17/09 13:52
Benzo (a) anthracene	1.67	1.09		mg/kg wet	66%	57 - 120	9112389	11/17/09 13:52
Benzo (a) pyrene	1.67	1.11		mg/kg wet	67%	55 - 120	9112389	11/17/09 13:52
Benzo (b) fluoranthene	1.67	1.04		mg/kg wet	62%	51 - 123	9112389	11/17/09 13:52
Benzo (g,h,i) perylene	1.67	1.10		mg/kg wet	66%	49 - 121	9112389	11/17/09 13:52
Benzo (k) fluoranthene	1.67	1.07		mg/kg wet	64%	42 - 129	9112389	11/17/09 13:52
Chrysene	1.67	1.08		mg/kg wet	65%	55 - 120	9112389	11/17/09 13:52
Dibenz (a,h) anthracene	1.67	1.10		mg/kg wet	66%	50 - 123	9112389	11/17/09 13:52
Fluoranthene	1.67	1.13		mg/kg wet	68%	58 - 120	9112389	11/17/09 13:52
Fluorene	1.67	1.07		mg/kg wet	64%	54 - 120	9112389	11/17/09 13:52
Indeno (1,2,3-cd) pyrene	1.67	1.14		mg/kg wet	69%	50 - 122	9112389	11/17/09 13:52
Naphthalene	1.67	0.851		mg/kg wet	51%	28 - 120	9112389	11/17/09 13:52
Phenanthrene	1.67	1.07		mg/kg wet	64%	56 - 120	9112389	11/17/09 13:52
Pyrene	1.67	1.06		mg/kg wet	63%	56 - 120	9112389	11/17/09 13:52
1-Methylnaphthalene	1.67	0.853		mg/kg wet	51%	36 - 120	9112389	11/17/09 13:52
2-Methylnaphthalene	1.67	0.907		mg/kg wet	54%	36 - 120	9112389	11/17/09 13:52
Surrogate: Terphenyl-d14	1.67	0.996			60%	18 - 120	9112389	11/17/09 13:52
Surrogate: 2-Fluorobiphenyl	1.67	0.850			51%	14 - 120	9112389	11/17/09 13:52
Surrogate: Nitrobenzene-d5	1.67	0.704			42%	17 - 120	9112389	11/17/09 13:52

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
9114172-BSD1												
Benzene		47.1		ug/kg	50.0	94%	78 - 126	0.3	50	9114172		11/23/09 14:38
Ethylbenzene		48.1		ug/kg	50.0	96%	79 - 130	2	50	9114172		11/23/09 14:38
Naphthalene		53.5		ug/kg	50.0	107%	72 - 150	4	50	9114172		11/23/09 14:38
Toluene		48.4		ug/kg	50.0	97%	76 - 126	0.7	50	9114172		11/23/09 14:38
Xylenes, total		136		ug/kg	150	90%	80 - 130	2	50	9114172		11/23/09 14:38
Surrogate: 1,2-Dichloroethane-d4		46.9		ug/kg	50.0	94%	67 - 138			9114172		11/23/09 14:38
Surrogate: Dibromofluoromethane		47.9		ug/kg	50.0	96%	75 - 125			9114172		11/23/09 14:38
Surrogate: Toluene-d8		46.7		ug/kg	50.0	93%	76 - 129			9114172		11/23/09 14:38
Surrogate: 4-Bromofluorobenzene		44.9		ug/kg	50.0	90%	67 - 147			9114172		11/23/09 14:38

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B										
9114172-MS1										
Benzene	ND	43.2		ug/kg	50.0	86%	42 - 141	9114172	NSK1441-01RE 2	11/23/09 23:29
Ethylbenzene	ND	45.9		ug/kg	50.0	92%	21 - 165	9114172	NSK1441-01RE 2	11/23/09 23:29
Naphthalene	ND	31.0		ug/kg	50.0	62%	10 - 160	9114172	NSK1441-01RE 2	11/23/09 23:29
Toluene	ND	45.8		ug/kg	50.0	92%	45 - 145	9114172	NSK1441-01RE 2	11/23/09 23:29
Xylenes, total	ND	128		ug/kg	150	86%	31 - 159	9114172	NSK1441-01RE 2	11/23/09 23:29
Surrogate: 1,2-Dichloroethane-d4		41.2		ug/kg	50.0	82%	67 - 138	9114172	NSK1441-01RE 2	11/23/09 23:29
Surrogate: Dibromofluoromethane		46.9		ug/kg	50.0	94%	75 - 125	9114172	NSK1441-01RE 2	11/23/09 23:29
Surrogate: Toluene-d8		48.3		ug/kg	50.0	97%	76 - 129	9114172	NSK1441-01RE 2	11/23/09 23:29
Surrogate: 4-Bromofluorobenzene		46.7		ug/kg	50.0	93%	67 - 147	9114172	NSK1441-01RE 2	11/23/09 23:29
Polyaromatic Hydrocarbons by EPA 8270D										
9112389-MS1										
Acenaphthene	ND	0.859		mg/kg dry	1.73	50%	42 - 120	9112389	NSK1299-03	11/17/09 14:15
Acenaphthylene	ND	0.882		mg/kg dry	1.73	51%	32 - 120	9112389	NSK1299-03	11/17/09 14:15
Anthracene	ND	1.03		mg/kg dry	1.73	59%	10 - 200	9112389	NSK1299-03	11/17/09 14:15
Benzo (a) anthracene	ND	0.978		mg/kg dry	1.73	57%	41 - 120	9112389	NSK1299-03	11/17/09 14:15
Benzo (a) pyrene	ND	0.960		mg/kg dry	1.73	56%	33 - 121	9112389	NSK1299-03	11/17/09 14:15
Benzo (b) fluoranthene	ND	0.887		mg/kg dry	1.73	51%	26 - 137	9112389	NSK1299-03	11/17/09 14:15
Benzo (g,h,i) perylene	ND	0.938		mg/kg dry	1.73	54%	21 - 124	9112389	NSK1299-03	11/17/09 14:15
Benzo (k) fluoranthene	ND	0.978		mg/kg dry	1.73	57%	14 - 140	9112389	NSK1299-03	11/17/09 14:15
Chrysene	ND	0.958		mg/kg dry	1.73	55%	28 - 123	9112389	NSK1299-03	11/17/09 14:15
Dibenz (a,h) anthracene	ND	0.950		mg/kg dry	1.73	55%	25 - 127	9112389	NSK1299-03	11/17/09 14:15
Fluoranthene	ND	0.986		mg/kg dry	1.73	57%	38 - 120	9112389	NSK1299-03	11/17/09 14:15
Fluorene	ND	0.955		mg/kg dry	1.73	55%	41 - 120	9112389	NSK1299-03	11/17/09 14:15
Indeno (1,2,3-cd) pyrene	ND	0.973		mg/kg dry	1.73	56%	25 - 123	9112389	NSK1299-03	11/17/09 14:15
Naphthalene	ND	0.769		mg/kg dry	1.73	44%	25 - 120	9112389	NSK1299-03	11/17/09 14:15
Phenanthrene	ND	0.934		mg/kg dry	1.73	54%	37 - 120	9112389	NSK1299-03	11/17/09 14:15
Pyrene	ND	0.938		mg/kg dry	1.73	54%	29 - 125	9112389	NSK1299-03	11/17/09 14:15
1-Methylnaphthalene	ND	0.764		mg/kg dry	1.73	44%	19 - 120	9112389	NSK1299-03	11/17/09 14:15
2-Methylnaphthalene	ND	0.824		mg/kg dry	1.73	48%	11 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: Terphenyl-d14		0.886		mg/kg dry	1.73	51%	18 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: 2-Fluorobiphenyl		0.787		mg/kg dry	1.73	46%	14 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: Nitrobenzene-d5		0.669		mg/kg dry	1.73	39%	17 - 120	9112389	NSK1299-03	11/17/09 14:15

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
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Polyaromatic Hydrocarbons by EPA 8270D

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
9114172-MSD1												
Benzene	ND	43.8		ug/kg	50.0	88%	42 - 141	1	50	9114172	NSK1441-01RE 2	11/24/09 00:00
Ethylbenzene	ND	45.4		ug/kg	50.0	91%	21 - 165	1	50	9114172	NSK1441-01RE 2	11/24/09 00:00
Naphthalene	ND	37.2		ug/kg	50.0	74%	10 - 160	18	50	9114172	NSK1441-01RE 2	11/24/09 00:00
Toluene	ND	45.5		ug/kg	50.0	91%	45 - 145	0.7	50	9114172	NSK1441-01RE 2	11/24/09 00:00
Xylenes, total	ND	128		ug/kg	150	85%	31 - 159	0.6	50	9114172	NSK1441-01RE 2	11/24/09 00:00
Surrogate: 1,2-Dichloroethane-d4		44.9		ug/kg	50.0	90%	67 - 138			9114172	NSK1441-01RE 2	11/24/09 00:00
Surrogate: Dibromofluoromethane		47.0		ug/kg	50.0	94%	75 - 125			9114172	NSK1441-01RE 2	11/24/09 00:00
Surrogate: Toluene-d8		47.1		ug/kg	50.0	94%	76 - 129			9114172	NSK1441-01RE 2	11/24/09 00:00
Surrogate: 4-Bromofluorobenzene		45.9		ug/kg	50.0	92%	67 - 147			9114172	NSK1441-01RE 2	11/24/09 00:00
Polyaromatic Hydrocarbons by EPA 8270D												
9112389-MSD1												
Acenaphthene	ND	1.00		mg/kg dry	1.75	57%	42 - 120	16	40	9112389	NSK1299-03	11/17/09 15:22
Acenaphthylene	ND	0.995		mg/kg dry	1.75	57%	32 - 120	12	30	9112389	NSK1299-03	11/17/09 15:22
Anthracene	ND	1.17		mg/kg dry	1.75	67%	10 - 200	13	50	9112389	NSK1299-03	11/17/09 15:22
Benzo (a) anthracene	ND	1.10		mg/kg dry	1.75	63%	41 - 120	12	30	9112389	NSK1299-03	11/17/09 15:22
Benzo (a) pyrene	ND	1.07		mg/kg dry	1.75	61%	33 - 121	11	33	9112389	NSK1299-03	11/17/09 15:22
Benzo (b) fluoranthene	ND	0.989		mg/kg dry	1.75	56%	26 - 137	11	42	9112389	NSK1299-03	11/17/09 15:22
Benzo (g,h,i) perylene	ND	1.07		mg/kg dry	1.75	61%	21 - 124	13	32	9112389	NSK1299-03	11/17/09 15:22
Benzo (k) fluoranthene	ND	1.12		mg/kg dry	1.75	64%	14 - 140	14	39	9112389	NSK1299-03	11/17/09 15:22
Chrysene	ND	1.09		mg/kg dry	1.75	62%	28 - 123	12	34	9112389	NSK1299-03	11/17/09 15:22
Dibenz (a,h) anthracene	ND	1.07		mg/kg dry	1.75	61%	25 - 127	12	31	9112389	NSK1299-03	11/17/09 15:22
Fluoranthene	ND	1.10		mg/kg dry	1.75	63%	38 - 120	11	35	9112389	NSK1299-03	11/17/09 15:22
Fluorene	ND	1.09		mg/kg dry	1.75	62%	41 - 120	13	37	9112389	NSK1299-03	11/17/09 15:22
Indeno (1,2,3-cd) pyrene	ND	1.12		mg/kg dry	1.75	64%	25 - 123	14	32	9112389	NSK1299-03	11/17/09 15:22
Naphthalene	ND	0.896		mg/kg dry	1.75	51%	25 - 120	15	42	9112389	NSK1299-03	11/17/09 15:22
Phenanthrene	ND	1.05		mg/kg dry	1.75	60%	37 - 120	12	32	9112389	NSK1299-03	11/17/09 15:22
Pyrene	ND	1.05		mg/kg dry	1.75	60%	29 - 125	12	40	9112389	NSK1299-03	11/17/09 15:22
1-Methylnaphthalene	ND	0.874		mg/kg dry	1.75	50%	19 - 120	13	45	9112389	NSK1299-03	11/17/09 15:22
2-Methylnaphthalene	ND	0.946		mg/kg dry	1.75	54%	11 - 120	14	50	9112389	NSK1299-03	11/17/09 15:22
Surrogate: Terphenyl-d14		0.988		mg/kg dry	1.75	56%	18 - 120			9112389	NSK1299-03	11/17/09 15:22
Surrogate: 2-Fluorobiphenyl		0.877		mg/kg dry	1.75	50%	14 - 120			9112389	NSK1299-03	11/17/09 15:22
Surrogate: Nitrobenzene-d5		0.751		mg/kg dry	1.75	43%	17 - 120			9112389	NSK1299-03	11/17/09 15:22

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	South Carolina
SW846 8260B	Soil	N/A	X	X
SW846 8270D	Soil		X	X
SW-846	Soil			

Client EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSK1299
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 11/13/09 08:00

DATA QUALIFIERS AND DEFINITIONS

ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

NSK1299
11/30/09 23 59

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Craigton
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 # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Fax No.: (843) - 879-0401

Sampler Name: (Print) *Per H Shaw*

Sampler Signature: *[Signature]*

Site State: SC

PO#: 0829

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix					Analyze For:										RUSH TAT (Pre-Schedule)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
							Ice	HNO ₃ (Red Label)	HCL (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	BTEX + Napth - 8280B	PAH - 8270D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

Special Instructions:

Method of Shipment:						FEDEX	
Relinquished by:	Date	Time	Received by:	Date	Time		
<i>[Signature]</i>	11/13/09	1900	<i>[Signature]</i>	11/13/09			
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time		
			<i>[Signature]</i>	11/13	8:00		

Laboratory Comments:

Temperature Upon Receipt:
VOCs Free of Headspace?

Y



NON-HAZARDOUS MANIFEST

CWM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address MCAS, Beaufort Laurel Bay Housing Beaufort SC 29904		A. Manifest Number WMNA 10885454		
4. Generator's Phone 843 228-8480		B. State Generator's ID		
5. Transporter 1 Company Name EEG, Inc.	6. US EPA ID Number	C. State Transporter's ID		
7. Transporter 2 Company Name	8. US EPA ID Number	D. Transporter's Phone 843 879-0411		
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL ROUTE 1, BOX 121 RIDGELAND SC 29936	10. US EPA ID Number	E. State Transporter's ID		
		F. Transporter's Phone		
		G. State Facility's ID		
		H. Facility's Phone 843 987-4843		
11. Description of Waste Materials		12. Containers No.	13. Total Quantity	14. Unit Wt./Vol.
a. Heating Oil Tank filled with Sand				
WM Profile # 1026558C		0 0 1	9 6 6	
b. WM Profile #				
c. WM Profile #				
d. WM Profile #				
J. Additional Descriptions for Materials Listed Above		K. Disposal Location		
Landfill _____ Solidification _____		Cell _____ Level _____		
Bio Remediation _____		Grid _____		
15. Special Handling Instructions and Additional Information GEM UST's FROM: 483 LAUREL BAY BLVD. Purchase Order # 3481 LAUREL BAY BLVD.		3405 ELDERBERRY 51419 ELDERBERRY 4413 ELDERBERRY 6419 ELDERBERRY		
16. GENERATOR'S CERTIFICATION: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 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.		EMERGENCY CONTACT:		
Printed/Typed Name W.B. Stokes, Jr.		Signature "On behalf of" <i>[Signature]</i>		Month Day Year 11/10/09
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Joseph Weston		Signature <i>[Signature]</i>		Month Day Year 11/10/09
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed 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/Typed Name Toni Coffield		Signature <i>[Signature]</i>		Month Day Year 11/10/09

Appendix C

Regulatory Correspondence

BOARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

BOARD:
Henry C. Scott
M. David Mitchell, MD
Glenn A. McCall
Coleman E. Buckhouse, MD

Bureau of Land and Waste Management
Division of Waste Management

September 9, 2010

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

RE: **No Further Action**
Laurel Bay Underground Storage Tank Assessment Report for:

- 413 Elderberry
- 534 Laurel Bay
- 417 Elderberry
- 419 Elderberry

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tanks (USTs) Assessment Report on February 17, 2010 for the addresses listed above.

The Department has reviewed the referenced assessment report along with the additional information submitted and agrees there is no indication of soil or groundwater contamination on this property, 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 Corp 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 picketcn@dhec.sc.gov or 803-896-4131.

Sincerely,

Christi Pickett
Corrective Action Engineering Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

cc: Laurel Rhoten (via email)
Craig Ehde (via email)