SUMMARY REPORT 132 ELDERBERRY DRIVE (FORMERLY 413 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
СТО	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 132 Elderberry Drive (Formerly 413 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 132 Elderberry Drive (Formerly 413 Elderberry Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 413 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 concrete porch at 132 Elderberry Drive (Formerly 413 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 132 Elderberry Drive (Formerly 413 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 132 Elderberry Drive (Formerly 413 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 – 413 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 1Laboratory Analytical Results - Soil132 Elderberry Drive (Formerly 413 Elderberry Drive)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 11/09/09				
/olatile 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 Anal	yzed 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:

<sup>(1)</sup> 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



Attachment 1

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



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

# I. OWNERSHIP OF UST (S)

	Commanding Officer Attn: N	REAO (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

	r I
Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Static	on, Beaufort, SC
Facility Name or Company Site Identifier	
413 Elderberry Drive, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
_Beaufort, Beaufort	
City County	

Attachment 2

# **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**

	VI. UST INFORMATION	413 Elderberry
A.	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
Е·	Month/Year of Last Use	Unknown
F.	Depth (ft.) To Base of Tank	6 '
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
I.	Method of Closure Removed/Filled	Removed
J <sub>.</sub>	Date Tanks Removed/Filled	11/9/09
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 413Elderberry 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 413Elderberry had been previously filled with sand by others.

0. 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

		413 Elderberry
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	Yes
F.	Visible Corrosion or Pitting Y/N	Yes
G.	Visible Holes Y/N	No
U.		
H.	Age	Late 1950s
I.	If any corrosion, pitting, or holes were observed, de	scribe 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
<ul> <li>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</li> <li>If yes, indicate depth and location on the site map.</li> </ul>		х	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?		х	
If yes, indicate location on site map and describe the odor (strong, mild, etc.)			
C. Was water present in the UST excavation, soil borings, or trenches?		х	
If yes, how far below land surface (indicate location and depth)?			
D. Did contaminated soils remain stockpiled on site after closure?		x	
If yes, indicate the stockpile location on the site map.			
Name of DHEC representative authorizing soil removal:		·	
E. Was a petroleum sheen or free product detected on any excavation or boring waters?		x	
If yes, indicate location and thickness.			

# X. SAMPLE INFORMATION

# A. SCDHEC Lab Certification Number 84009001

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
413 El- derberry	Excav at fill end	Soil	Sandy	6'	11/09/09 0945 hrs	P. Shaw	
derberry						1. Dilaw	
			·				
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 <u>and</u> 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.

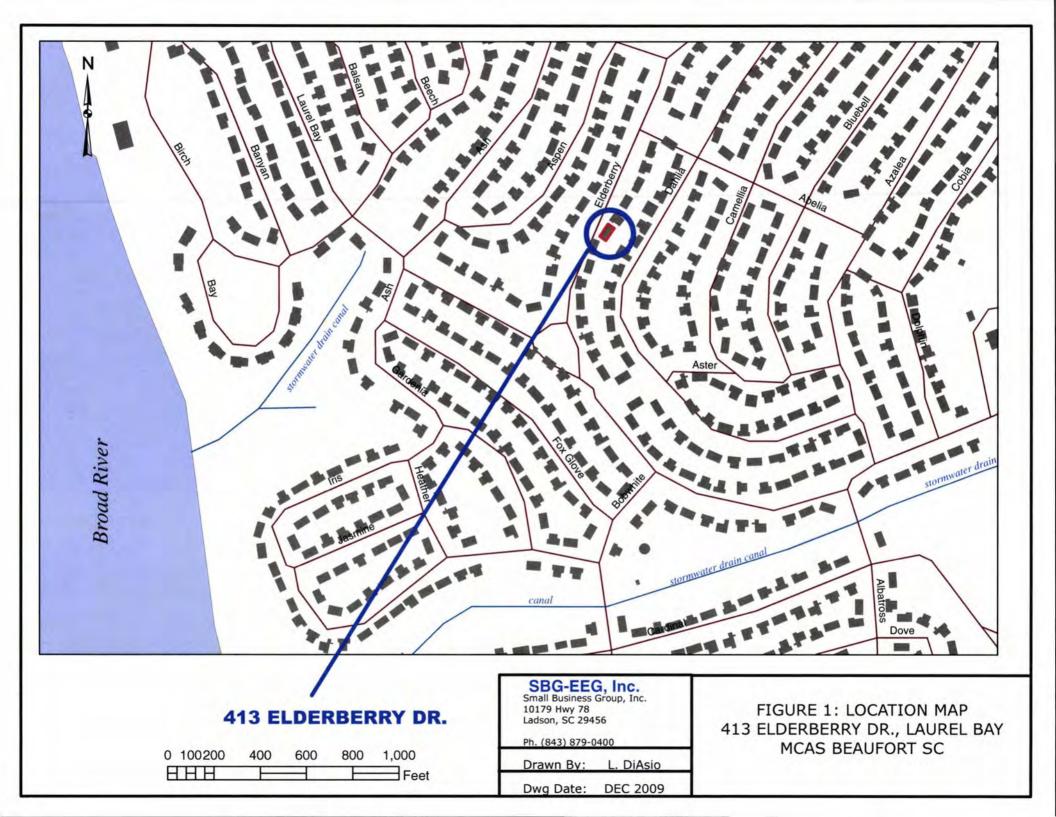
# **XII. RECEPTORS**

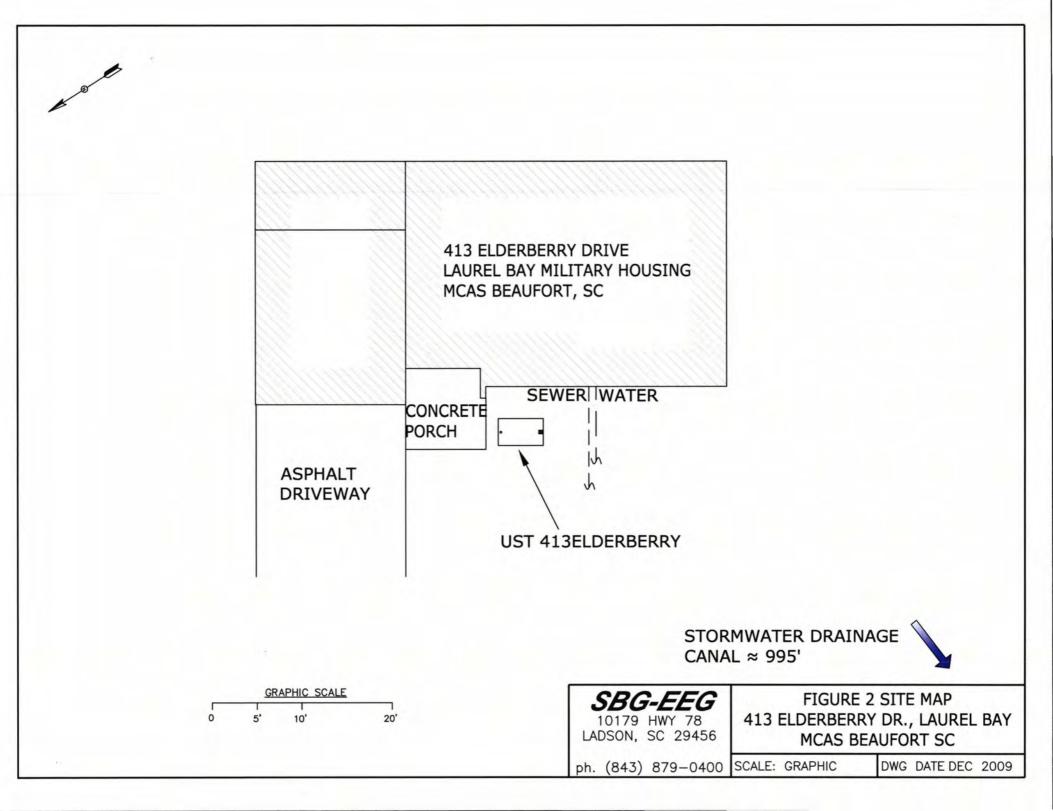
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*Stormwater drainage car	al ~	995'
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
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 and water	*X	
	If yes, indicate the type of utility, distance, and direction on the site map.		
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?		Х
	If yes, indicate the area of contaminated soil on the site map.		

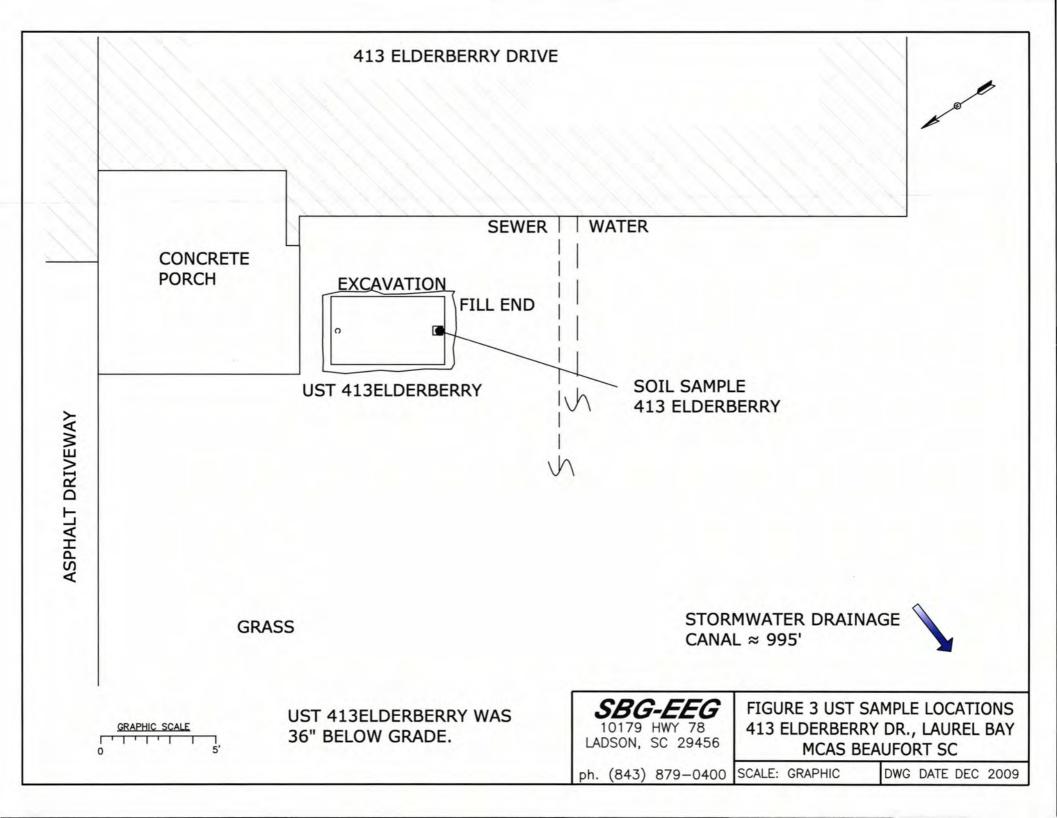
# XIII. SITE MAP

You must supply a <u>scaled</u> 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)









Picture 1: Location of UST 413Elderberry.



Picture 2: UST 413Elderberry 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.

			1	
CoC UST	413Elderber	ry	 	
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			
ТРН (ЕРА 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				
МТВЕ	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)



THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

November 25, 2009 3:06:37PM

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

Work Order: Project Name: Project Nbr: P/O Nbr: Date Received:

NSK1299 Laurel Bay Housing Project [none] 0829 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:

Kenne Hattage

Ken A. Hayes Senior Project Manager

## THE LEADER IN ENVIRONMENTAL TESTING

### 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Eld	erberry - Soil)	Sampled:	11/09/09 09:4	5					
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	911417.
Surr: Dibromofluoromethane (75-125%)	99 %					11/23/09 17:22	SW846 8260B	KxC	911417.
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	911417.

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 - Soi	l) - cont.	Sampled:	11/09/09 09	:45					
Polyaromatic Hydrocarbons by EF	PA 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	I	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	I	11/17/09 21:45	SW846 8270D	RMC	9112389
Surr: Terphenyl-d14 (18-120%)	65 %					1	11/17/09 21:45	SW846 8270D	RMC	911238
Surr: 2-Fluorobiphenyl (14-120%)	47 %					1	11/17/09 21:45	SW846 8270D	RMC	911238
Surr: Nitrobenzene-d5 (17-120%)	41 %					1	11/17/09 21:45	SW846 8270D	RMC	911238

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Eld	erberry - Soil) S	Sampled:	11/09/09 11:3	15								
General Chemistry Parameters												
% Dry Solids	93.6		%	0.500	1	11/25/09 09:32	SW-846	BJM	9114131			
Selected Volatile Organic Compounds	s 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			

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 I	Elderberry - Soi	l) - cont.	Sampled:	11/09/09 11	:35			- '		
Polyaromatic Hydrocarbons by EP.	A 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	911238
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 827(ID	RMC	911238
Surr: 2-Fluorobiphenyl (14-120%)	46 %					1	11/18/09 12:19	SW846 8270D	RMC	911238
Surr: Nitrobenzene-d5 (17-120%)	42 %					1	11/18/09 12:19	SW846 8270D	RMC	911238

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Eld	erberry - Soil)	Sampled:	11/09/09 15:1	5					
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	ł	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	911417
Surr: Dibromofluoromethane (75-125%)	97 %					11/23/09 18:23	SW846 8260B	KxC	911417
Surr: Toluene-d8 (76-129%)	94 %					11/23/09 18:23	SW846 8260B	KxC	911417
Surr: 4-Bromofluorobenzene (67-147%)	89 %					11/23/09 18:23	SW846 8260B	KxC	911417

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MÐL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSK1299-03 (419 I	Elderberry - Soi	l) - cont.	Sampled:	11/09/09 15	:15					
Polyaromatic Hydrocarbons by EP	A 8270D									
Acenaphthene	ND		mg/kg dry	0.0234	0.0712	I	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	I	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	I	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

THE LEADER IN ENVIRONMENTAL TESTING

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Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

#### SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Datc	Analyst	Extraction Method
Polyaromatic Hydrocarbons by I	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 Comp	ounds 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

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK 1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Compo	ounds by EPA Method	1 8260B				
)114172-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
olyaromatic Hydrocarbons by I	EPA 8270D					
0112389-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 wct	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
- I-Methylnaphthalene	<0.0170		mg/kg wet	9112389	9112389-BLK1	11/17/09 13:30
2-Mcthylnaphthalene	< 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

#### THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

## PROJECT QUALITY CONTROL DATA Duplicate

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

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

## PROJECT QUALITY CONTROL DATA

LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rcc.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compound	nds by EPA Method 82	60B						
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
Naphthalenc	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 EP	PA 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) pyrenc	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
I-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

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Compour	ds by EPA	Method 820	50B									
9114172-BSD1												
Benzenc		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

THE LEADER IN ENVIRONMENTAL TESTING

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

#### PROJECT QUALITY CONTROL DATA Matrix Spike

Selected Volatile Organic Compound 9114172-MS1 Benzene Ethylbenzene Naphthalene Tolucne	s by EPA Me ND ND ND ND ND	43.2 45.9 31.0 45.8		ug/kg ug/kg ug/kg	50.0 50.0	86% 92%	42 - 141 21 - 165	9114172	NSK1441-01RE 2	11/23/09 23:29
9114172-MS1 Benzene Ethylbenzene Naphthalene	ND ND ND ND	43.2 45.9 31.0		ug/kg						11/23/09 23:29
Benzene Ethylbenzene Naphthalene	ND ND ND	45.9 31.0		ug/kg						11/23/09 23:29
Naphthalene	ND ND	31.0			50.0	92%	21 - 165			
	ND			ug/kg			40 - TUJ	9114172	NSK1441-01RE 2	11/23/09 23:29
Tolucne		45.8			50.0	62%	10 - 160	9114172	NSK1441-01RE 2	11/23/09 23:29
	ND			ug/kg	50.0	92%	45 - 145	9114172	NSK1441-01RE 2	11/23/09 23:29
Xylencs, total		128		ug/kg	150	86%	31 - 159	9114172	NSK1441-01RE	11/23/09 23:29
Surrogate: 1,2-Dichloroethane-d4		41.2		ug/kg	50.0	82%	67 - 138	9114172	2 NSK 1441-01RE 2	11/23/09 23:29
Surrogate: Dibromofluoromethane		46.9		ug/kg	50.0	94%	75 - 125	9114172	NSK 1441-01RE 2	11/23/09 23:29
Surrogate: Toluene-d8		48.3		ug/kg	50.0	97%	76 - 129	9114172	2 NSK1441-01RE 2	11/23/09 23:29
Surrogate: 4-Bromofluorobenzene		46.7		ug/kg	50.0	93%	67 - 147	9114172	2 NSK1441-01RE 2	11/23/09 23:29
Polyaromatic Hydrocarbons by EPA	8270D									
9112389-MS1										
Acenaphthene	ND	0.859	n	ng/kg dry	1.73	50%	42 - 120	9112389	NSK1299-03	11/17/09 14:15
Acenaphthylene	ND	0.882	n	ng/kg dry	1.73	51%	32 - 120	9112389	NSK1299-03	11/17/09 14:15
Anthracene	ND	1.03	n	ng/kg dry	1.73	59%	10 - 200	9112389	NSK1299-03	11/17/09 14:15
Benzo (a) anthracene 4	ND	0.978	n	ng/kg dry	1.73	57%	41 - 120	9112389	NSK1299-03	11/17/09 14:15
Benzo (a) pyrene	ND	0.960	n	ng/kg dry	1.73	56%	33 - 121	9112389	NSK1299-03	11/17/09 14:15
Benzo (b) fluoranthene	ND	0.887	n	ng/kg dry	1.73	51%	26 - 137	9112389	NSK1299-03	11/17/09 14:15
Benzo (g,h,i) perylene	ND	0.938	n	1g/kg dry	1.73	54%	21 - 124	9112389	NSK1299-03	11/17/09 14:15
Benzo (k) fluoranthene	ND	0.978	n	ng/kg dry	1.73	57%	14 - 140	9112389	NSK1299-03	11/17/09 14:15
Chrysene	ND	0.958	n	ng/kg dry	1.73	55%	28 - 123	9112389	NSK1299-03	11/17/09 14:15
Dibenz (a,h) anthracene	ND	0.950	n	ng/kg dry	1.73	55%	25 - 127	9112389	NSK1299-03	11/17/09 14:15
Fluoranthene	ND	0.986	n	ng/kg dry	1.73	57%	38 - 120	9112389	NSK1299-03	11/17/09 14:15
Fluorene	ND	0.955	n	ng/kg dry	1.73	55%	41 - 120	9112389	NSK1299-03	11/17/09 14:15
Indeno (1,2,3-cd) pyrene	ND	0.973	n	ng/kg dry	1.73	56%	25 - 123	9112389	NSK1299-03	11/17/09 14:15
Naphthalene	ND	0.769	n	ng/kg dry	1.73	44%	25 - 120	9112389	NSK1299-03	11/17/09 14:15
Phenanthrene	ND	0.934	n	ng/kg dry	1.73	54%	37 - 120	9112389	NSK1299-03	11/17/09 14:15
Pyrene	ND	0.938	n	ng/kg dry	1.73	54%	29 - 125	9112389	NSK1299-03	11/17/09 14:15
1-Methylnaphthalene	ND	0.764	n	1g/kg dry	1.73	44%	19 - 120	9112389	NSK1299-03	11/17/09 14:15
2-Methylnaphthalene	ND	0.824	n	ng/kg dry	1.73	48%	11 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: Terphenyl-d14		0.886	n	ng/kg dry	1.73	51%	18 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: 2-Fluorobiphenyl		0.787	n	ng/kg dry	1.73	46%	14 - 120	9112389	NSK1299-03	11/17/09 14:15
Surrogate: Nitrobenzene-d5		0.669	n	ng/kg dry	1.73	39%	17 - 120	9112389	NSK1299-03	11/17/09 14:15



Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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
Polyaromatic Hydrocarbons by EPA	8270D									

Page 14 of 17

**TestAmerica** 

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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 Comp	ounds by EPA	Method 826	60B									
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	2 NSK1441-01RE 2	11/24/09 00:00
Naphthalene	ND	37.2		ug/kg	50.0	74%	10 - 160	18	50	9114172	2 NSK1441-01RE 2	11/24/09 00:00
Toluene	ND	45.5		ug/kg	50.0	91%	45 - 145	0.7	50	9114172	2 NSK1441-01RE 2	11/24/09 00:00
Xylenes, total	ND	128		ug/kg	150	85%	31 - 159	0.6	50	9114172	2 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	11/24/09 00:00
Surrogate: Dibromofluoromethane		47.0		ug/kg	50.0	94%	75 - 125			9114172	2 NSK1441-01RE	11/24/09 00:00
Surrogate: Toluene-d8		47.1		ug/kg	50.0	94%	76 - 129			9114172	2 NSK1441-01RE	11/24/09 00:00
Surrogate: 4-Bromofluorobenzene		45.9		ug/kg	50.0	92%	67 - 147			9114172	2 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	н	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
Fluorenc	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



**TestAmerica** Nashville

Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	Received:	11/13/09 08:00

## **CERTIFICATION SUMMARY**

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



Client	EEG - Small Business Group, Inc. (2449)	Work Order:	NSK1299
	10179 Highway 78	Project Name:	Laurel Bay Housing Project
	Ladson, SC 29456	Project Number:	[none]
Attn	Tom McElwee	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



	State	Nashville 2960 Fosi Nashville	ter Crei	ighto	n			1	foll F	ree:	800	-765	-0177 -0980 -3404	I							metho	ids, is t		rk bein		analytic ducted f				
Client Name/Account #:	EEG # 2449																						(	Compli	ance f	Monitori	ng?	Ye	s	No
Address:	10179 Highway	78																						Enfor	cemer	nt Action	n?	Ye	s	_ No
City/State/Zip:	Ladson, SC 294	456																:	Site S											
Project Manager:	Tom McElwee	email: mcelv	/ee@ee	ginc.n	iet		<del></del>	-1	-		<b>`</b>																			
Telephone Number:		110				F	ax No	<u>o.:</u>	24	3	/	- 8	29	- 0	40	/											<u> </u>			
Sampler Name: (Print)			6.10		$\leq$					<u>-</u>									-			Bay H	lousing	Proje	ct					
Sampler Signature:	&	V.T.	t¥,	7_										_		_			Proje	ect #:										
	<del>,</del>		$\langle -$	<u>,                                     </u>	<u> </u>		-	- 13	Pres	ervat	ive T	- 7-	<u>ş</u> ]-	<u> </u>	Mat	trix T		+	81			<u> </u>	<u></u>	nalyze	For:			- <del></del>		
Sample ID / Description 413 K (Scabany 417 Eldechary 419 Eldechary 419 Eldechary	11999	1135 1515	Shipped	K X Grab	Composite	Field Filtered				H.SO4 Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label)	V V V None (Black Label)	Ghiar (Specify) / 2014	Wastewater	Drinking Water	Sludge	2 × 201	Ī	W W BTEX + Napth - 8260	W 20D - HPAH - 8270D										RUSH TAT (Pre-Schedu
	<u> </u>	+		$\uparrow$				+	+	$\uparrow$	11	-†	+	†	$\uparrow \uparrow$	-	+	+					1	1	+	+	+	+	<u> </u>	<b>├</b> ─┼
		1		+				+	+	+-	$\uparrow$	-†	╋	$\uparrow$	$\uparrow \uparrow$	-+	-+-	╈				<u> </u>			+		+	+	+	╏─┤
	1		$\uparrow$	1				-		1			+	1	$\uparrow \uparrow$		-	$\top$	-			<u> </u>	<u>†</u>	+	1					
Special Instructions:	L Da	te /	Tir	me	Rece	ived b	_	hod	of Sh	ipm	ent:				6.	ite	FED		Time		Labor	Temp	Comm erature Free	e Upon			_	- <b>4</b>		Y
Rélingdished by:	1/12	109	190	on			بر			$\sim$	$\searrow$			1					Time											
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# ATTACHMENT A



# **NON-HAZARDOUS MANIFEST**

NON-HAZARDOUS MANIFEST	Manifest Document	No.	2. Page	e 1			
		1.	of				
3. Generator's Name and Mailing Address				MN	4	108	85454
MCAS, Beaufort Laurel Bay Housing Beaufort SC 29904				Generator			
4. Generator's Phone 843 228-6460							
5. Transporter 1 Company Name 6. US EPA ID Number	r		C. State	Transporte	er's ID		
EEG, Inc.	1.1.1	1.	D. Trans	sporter's Ph	one 84	3 879	-0411
7. Transporter 2 Company Name 8. US EPA ID Number	r			Transporte	1	-	
				sporter's Ph			
9. Designated Facility Name and Site Address 10. US EPA ID Number	r		G. State	Facility's II	5		4
HICKORY HILL LANDFILL			H. Facili	ity's Phone	-		
ROUTE 1, BOX 121 RIDGELAND SC 29936	1 I I	1			84	3 987-	4643
11. Description of Waste Materials	12	. Conta	iners	13 Tot	al	14. Unit	l.
Harting All Tank Mad with Cand	N	lo.	Туре	Quar	ntity	Wt./Vol.	Misc. Comme
Heating Oil Tank filled with Sand							
WM Profile # 1026555C	0,0	11	T	1 10	1616		A
	-	-	-1-		11.010		the second
WM Profile #	11	1	1	11	11.	2	
h					-		
WM Profile #		1	1		LL		
WM Profile #							
		-			1	1	
J. Additional Descriptions for Materials Listed Above			R. Dis	sposal Loc	ation		
Landfill Solidification			Cell			Leve	əl
Bio Remediation		1	Grid	200			
15. Special Handling Instructions and Additional Information 3405 Eld				0141		-	banay
Purchase Order # 2 Hol LAWREN BAY BLUL ANHIS Eld	enhe.	RA	1	À die			
Purchase Order # 2481 LAUREL BAY BING. EMERGENCY CONTA	CT.	1	9	2419	1EI	dare	DRRRY
16. GENERATOR'S CERTIFICATION:	101.					- 2	1
					10.05		
I hereby certify that the above-described materials are not hazardou							
applicable state law, have been fully and accurately described, clas for transportation according to applicable regulations.	ssilleu al	nu p	achag	jeu, an	uale	in prop	Jei conditioi
					_		14 - H - D
Printed/Typed Name	t of"						Month Day
7. Transporter 1 Acknowledgement of Receipt of Materials	18.00						UND
Printed/Typed Name Signature Signature	1	1	11	To	-	~	Month Day
Joseph Weston Casell	2 -	11	100	AL			1/1/11/01
8. Transporter 2 Acknowledgement of Receipt of Materials		00	- P		-		The trained
Printed/Typed Name Signature	-						Month Day
	4						
9. Certificate of Final Treatment/Disposal							
	nest of m						
I certify, on behalf of the above listed treatment facility, that to the b				ac on th	ne dat	es liste	ed above.
		and li	cense	65 UN U	io dat		
I certify, on behalf of the above listed treatment facility, that to the b was managed in compliance with all applicable laws, regulations, p	ermits a	and li	cense	5 01 ti	io dat		
I certify, on behalf of the above listed treatment facility, that to the b	ermits a	and li		es 011 ti	io dai		Month Day

Appendix C Regulatory Correspondence



BOARD: Paul C. Aughtry, III Chairman

Edwin H. Cooper, III Vice Chairman

Steven G. Kisner Secretary



BOARD: Henry C. Scott

M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

C. Earl Hunter, Commissioner Promoting and protecting the health of the public and the environment

> 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 <u>picketcn@dhec.sc.gov</u> or 803-896-4131.

Sincerely,

Unis Picket

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)