SUMMARY REPORT
180 WEST CARDINAL LANE (FORMERLY 1219 WEST CARDINAL LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



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

ft feet

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 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area



is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.

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

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

1.2 UST Removal and Assessment Process

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

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

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management*



Division (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1219 West Cardinal Lane* (MCAS Beaufort, 2009). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On August 24, 2009, a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the concrete porch at 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. 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 6'2" 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 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On June 10, 2015, a temporary monitoring well was installed at 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).



The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).

2.4 Groundwater Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 2. A copy of the laboratory analytical data report is included in Appendix C.

The groundwater results collected from 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2009. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1219 West Cardinal Lane, Laurel Bay Military Housing Area, November 2009.

Resolution Consultants, 2015. *Initial Groundwater Investigation Report – May and June 2015* for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, October 2015.



- 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.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables



Table 1

Laboratory Analytical Results - Soil 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane) Laurel Bay Military Housing Area

Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 08/24/09
Volatile Organic Compounds Analyz	ed by EPA Method 8260B (mg/kg)	
Benzene	0.003	ND
Ethylbenzene	1.15	0.127
Naphthalene	0.036	0.0160
Toluene	0.627	1.67
Xylenes, Total	13.01	0.568
Semivolatile Organic Compounds Ar	nalyzed by EPA Method 8270D (mg/kg)	
Benzo(a)anthracene	0.66	0.394
Benzo(b)fluoranthene	0.66	0.525
Benzo(k)fluoranthene	0.66	0.358
Chrysene	0.66	0.642
Dibenz(a,h)anthracene	0.66	ND

Notes:

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 - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0 (SCDHEC, April 2013).

Table 2

Laboratory Analytical Results - Groundwater 180 West Cardinal Lane (Formerly 1219 West Cardinal Lane)

Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 06/10/15			
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (μg	/L)				
Benzene	5	16.24	ND			
Ethylbenzene	700	45.95	ND			
Naphthalene	25	29.33	0.17			
Toluene	1000	105,445	0.42			
Xylenes, Total	10,000	2,133	ND			
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)						
Benzo(a)anthracene	10	NA	ND			
Benzo(b)fluoranthene	10	NA	0.050			
Benzo(k)fluoranthene	10	NA	ND			
Chrysene	10	NA	0.050			
Dibenz(a,h)anthracene	10	NA	ND			

Notes:

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

(2) Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1x10⁻⁶, a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

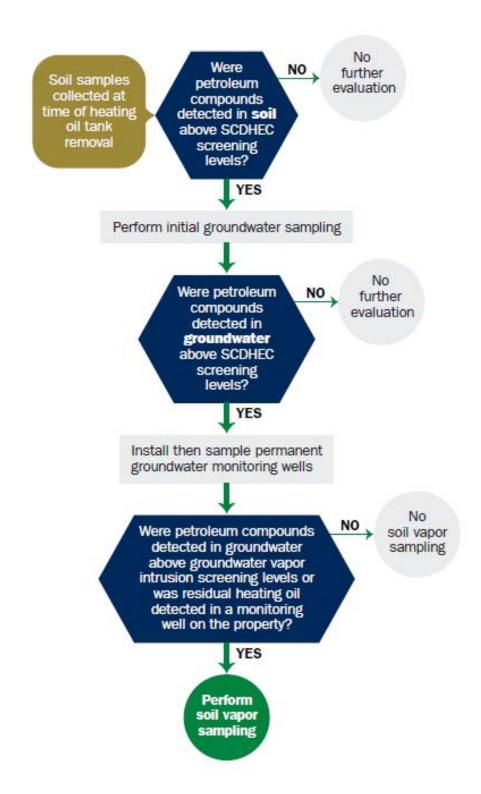
SCDHEC - South Carolina Department Of Health and Environmental Control

μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A Multi-Media Selection Process for LBMH



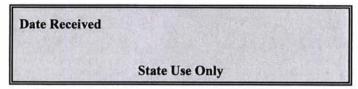


Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Report



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



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



NOV 1 3 2009

SC DHEC - Bureau of Land & Waste Management

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
1219 Cardinal Lane, Laurel Bay Military Housing Area
Street Address or State Road (as applicable)
Beaufort, Beaufort
City County
AND THE PROPERTY OF THE PROPER

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on at Permit ID Number may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. This section must be completed.
Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES NO (check one)
If you answered YES to the above question, please complete the following information:
My policy provider is: The policy deductible is: The policy limit is:
If you have this type of insurance, please include a copy of the policy with this report.
IV. REQUEST FOR SUPERB FUNDING
I DO / DO NOT wish to participate in the SUPERB Program. (Circle one.)
V. CERTIFICATION (To be signed by the UST owner)
I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.
Name (Type or print.)
Signature
To be completed by Notary Public:
Sworn before me this day of, 20
(Name)
Notary Public for the state of Please affix State seal if you are commissioned outside South Carolina

	_
1219	
Cardinal	
Heating oil	_
280 gal	
-00 gaz	_
Late 1950s	
Steel	
Steel	
Mid 1980s	
6'2"	
NO NO	
	_
No	
Removed	_
8/24/09	
Yes	
Vo s	
res	_
he ground (attach disposal manifests)	
hment "A".	
ges or wastewaters removed from the USTs (attach	
ges, or wastewaters removed from the OS1s (attach	
ously filled with sand by others.	
describe the location and extent for each UST	
1	Cardinal Heating oil 280 gal Late 1950s Steel Mid 1980s 6'2" No No Removed 8/24/09 Yes Yes The ground (attach disposal manifests) om the ground and disposed of at a chment "A".

VII. PIPING INFORMATION

	Cardinal	
	Steel	
Construction Material(ex. Steel, FRP)	& Copper	
Distance from UST to Dispenser	N/A	
Number of Dispensers	N/A	
Type of System Pressure or Suction	Suction	
Was Piping Removed from the Ground? Y/N	Yes	
Visible Corrosion or Pitting Y/N	Yes	
Visible Holes Y/N	No	
Age	Late 1950s	
If any corrosion, pitting, or holes were observed,	describe the location and extent for	each piping ru
Corrosion and pitting were foun	d on the surface of the	steel vent
Corrosion and pitting were foun		steel vent
		steel vent
	lines were sound. RIPTION AND HISTORY	
VIII. BRIEF SITE DESCETATE USTs at the residences are cand formerly contained fuel oil	lines were sound. RIPTION AND HISTORY onstructed of single wal for heating. These USTs	l steel were
viii. BRIEF SITE DESCE	lines were sound. RIPTION AND HISTORY onstructed of single wal for heating. These USTs	l steel were
VIII. BRIEF SITE DESCETATE USTs at the residences are cand formerly contained fuel oil	lines were sound. RIPTION AND HISTORY onstructed of single wal for heating. These USTs	l steel were
VIII. BRIEF SITE DESCETATE USTs at the residences are cand formerly contained fuel oil	lines were sound. RIPTION AND HISTORY onstructed of single wal for heating. These USTs	l steel were
VIII. BRIEF SITE DESCETATE USTs at the residences are cand formerly contained fuel oil	lines were sound. RIPTION AND HISTORY onstructed of single wal for heating. These USTs	l steel were

IX. SITE CONDITIONS

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

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#
1219 Cardinal	Excav at fill end		Sandy	6'2"	8/24/09 1345 hrs	P. Shaw	
			······································				
							×
		,				, i	
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 th
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.

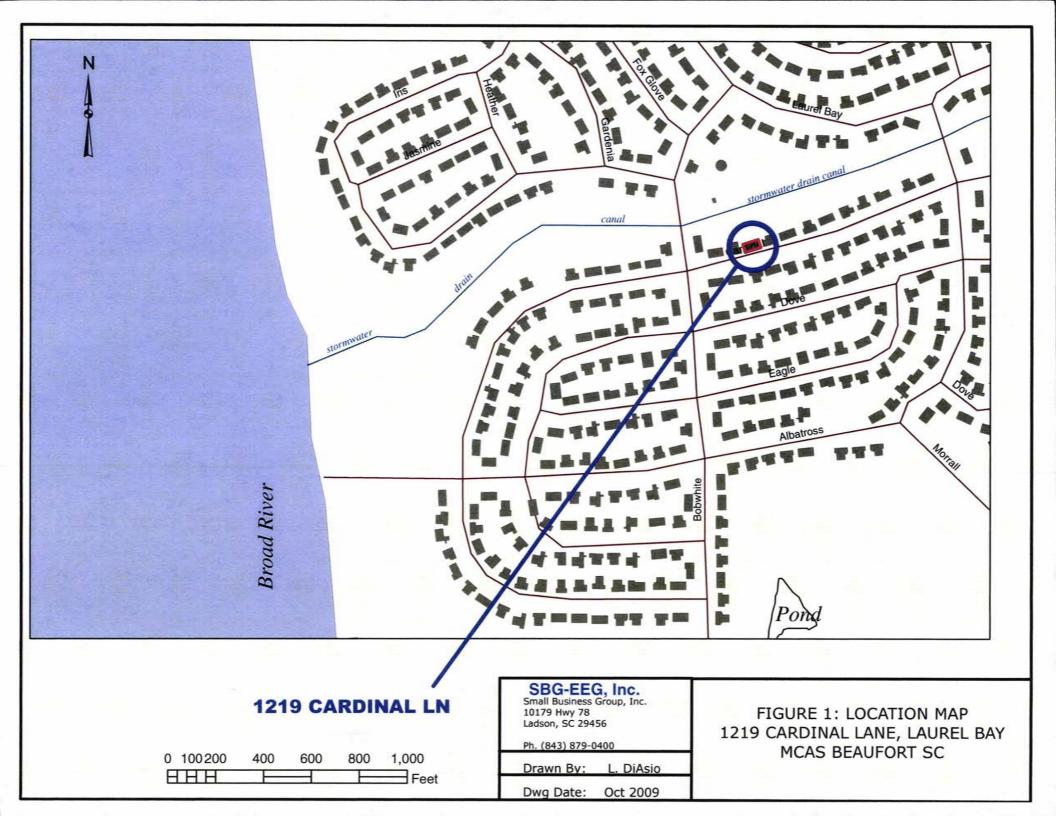
XII. RECEPTORS

		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	
	*Stormwater drainage canal ~ If yes, indicate type of receptor, distance, and direction on site map.	180'	
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.

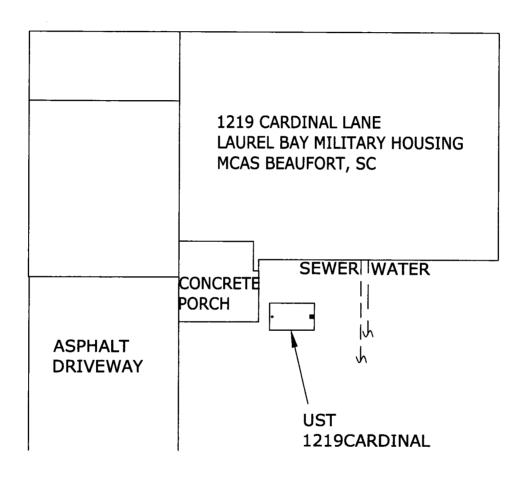
(Attach Site Map Here)

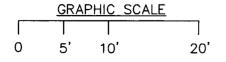


STORMWATER DRAINAGE **CANAL** ≈ 180'







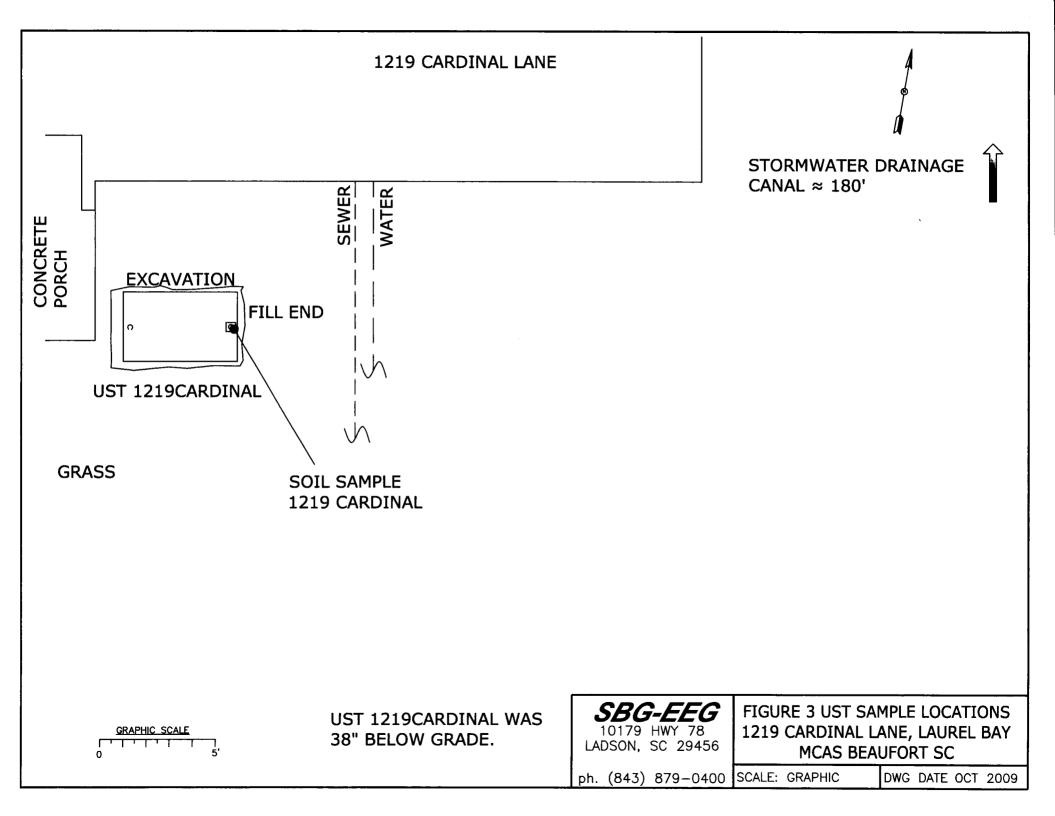


SBG-EEG 10179 HWY 78 LADSON, SC 29456

FIGURE 2 SITE MAP 1219 CARDINAL LANE, LAUREL BAY MCAS BEAUFORT SC

ph. (843) 879-0400 SCALE: GRAPHIC

DWG DATE OCT 2009





Picture 1: Location of UST 1219Cardinal.



Picture 2: UST 1219Cardinal.

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	1219Cardinal
Benzene	ND
Toluene	1.67 mg/kg
Ethylbenzene	0.127 mg/kg
Xylenes	0.568 mg/kg
Naphthalene	0.0160 mg/kg
Benzo (a) anthracene	0.394 mg/kg
Benzo (b) fluoranthene	0.525 mg/kg
Benzo (k) fluoranthene	0.358 mg/kg
Chrysene	0.642 mg/kg
Dibenz (a, h) anthracene	ND
TPH (EPA 3550)	
СоС	
Benzene	
Toluene	
Ethylbenzene	
Xylenes	
Naphthalene	
Benzo (a) anthracene	
Benzo (b) fluoranthene	
Benzo (k) fluoranthene	
Chrysene	
Dibenz (a, h) anthracene	
TPH (EPA 3550)	

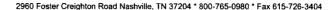
SUMMARY OF ANALYSIS RESULTS (cont'd)
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

is present, indicate the measured	T			1	
СоС	RBSL	W-1	W-2	W -3	W -4
	(µg/l)				
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)





September 14, 2009

2:05:14PM

Client:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn:

Tom McElwee

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Nbr: P/O Nbr: [none] 0829

Date Received:

d: 08/28/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1227 Dove	NSH2536-01	08/25/09 15:00
1225 Dove	NSH2536-02	08/25/09 15:30
1223 Cardinal	NSH2536-03	08/25/09 10:30
1224 Cardinal	NSH2536-04	08/25/09 09:20
1219 Cardinal	NSH2536-05	08/24/09 13:45
1218 Cardinal	NSH2536-06	08/24/09 11:55
1215 Cardinal	NSH2536-07	08/24/09 10:30
1214 Cardinal	NSH2536-08	08/24/09 10:15

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.

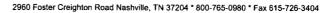
This report has been electronically signed.

Em & Hage

Report Approved By:

Ken A. Hayes

Senior Project Manager



NSH2536

Laurel Bay Housing Project



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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Project Name: Project Number:

roject Number: [none]

Work Order:

Received: 08/28/09 08:00

ANALYTICAL REPORT

Sample ID: NSH2536-01 (1227 Dove - Soil) Sampled: 08/25/09 15:00				ANALITICAL	KETOKI					
General Chemistry Parameters % Dy Solids 94.9 % 0.500 1 091009 11:04 SW-846 AJK 90910 19 Selected Volatile Organic Compounds by EVA Method 8260B mg/kg dry 0.00215 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Ethylbenzene ND mg/kg dry 0.00215 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Toluene ND mg/kg dry 0.00215 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Toluene ND mg/kg dry 0.00215 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Toluene ND mg/kg dry 0.00238 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Xylencs, total ND mg/kg dry 0.00538 1 0.907/09 18:46 SW-84 8260B K.C. 90848 Surr: Jehromofluoromethane (73-1239) 93 SY L L 0.907/07 18:46 SW-84 8270B K.C. 90848	Analyte	Result	Flag	Units	MRL		•	Method	Analyst	Batch
General Chemistry Parameters % Dy Solids 94.9 94.0 0.500 1 09/10/99 11-04 SW-846 Ag/R 99/91/19 Selected Volatile Organic Compounds by EPA Method 8260B mg/kg dry 0.00215 1 0.907/09 18-46 SW-84 8260B KxC 90848 Ethylbenzene ND mg/kg dry 0.00215 1 0.907/09 18-46 SW-84 8260B KxC 90848 Chylbenzene ND mg/kg dry 0.00215 1 0.907/09 18-46 SW-84 8260B KxC 90848 Tollene ND mg/kg dry 0.00218 1 0.907/09 18-46 SW-84 8260B KxC 90848 Tollene ND mg/kg dry 0.00218 1 0.907/09 18-46 SW-84 8260B KxC 90848 Xylenes, total ND mg/kg dry 0.00218 1 0.907/09 18-46 SW-84 8260B KxC 90848 Surr: 1.2-Dichorloneomenduc (67-138%) 87.8 5 4 2 4 5 9097/09 18-46 SW-84	Sample ID: NSH2536-01 (1227 Do	ove - Soil) Samı	oled: 08/2	5/09 15:00			•			
% Dry Solids 94.9 % 0.500 1 091009 11:04 SW-846 AJK 091011 Selected Volatile Organic Compounds by EPA Method 8260B Enzeme ND mg/kg dry 0.00215 1 0907/09 18:46 SW-846 8260B KxC 90848 Ethylbenzee ND mg/kg dry 0.00215 1 0907/09 18:46 SW-846 8260B KxC 90848 Naphthalene ND mg/kg dry 0.00538 1 0907/09 18:46 SW-846 8260B KxC 90848 Toluene ND mg/kg dry 0.00538 1 0907/09 18:46 SW-846 8260B KxC 90848 Xylenes, total ND mg/kg dry 0.00538 1 0907/09 18:46 SW-846 8260B KxC 90848 Xylenes, total ND mg/kg dry 0.00538 1 0907/09 18:46 SW-846 8260B KxC 90848 Xylenes, total ND mg/kg dry 0.00538 1 0907/09 18:46 SW-846 8260B KxC 90848 Xyrr-12-Dix										
Selected Volatile Organic Compounds by EPA Method 8260B Benzene ND mg/kg dry 0.00215 1 0.907/09 18.46 \$\$8346 \$\$260B \$\$K\$\$\$C 90848 \$\$Rhyhthenzene ND mg/kg dry 0.00215 1 0.907/09 18.46 \$\$8346 \$\$260B \$\$K\$\$\$C 90848 \$\$Rhyhthenzene ND mg/kg dry 0.00215 1 0.907/09 18.46 \$\$8346 \$\$260B \$\$K\$\$\$C 90848 \$\$Rhyhthenzene ND mg/kg dry 0.00215 1 0.907/09 18.46 \$\$8346 \$\$260B \$\$K\$\$\$C 90848 \$\$Rhyhthenzene ND mg/kg dry 0.00215 1 0.907/09 18.46 \$\$8346 \$\$260B \$\$K\$\$\$C 90848 \$\$K\$	•	94.9		%	0.500	1	09/10/09 11:04	SW-846	A IIV	9091140
Benzene	·			/ *	0.500	•	05/10/05 11:04	5.1. 6.16	AJK	2021140
Ethylbenzene	Selected Volatile Organic Compounds	s by EPA Method	8260B							
Naphthalene				mg/kg dry	0.00215	1	09/07/09 18:46	SW846 8260B	KxC	9084866
Toluene ND mg/kg dry 0.00215 1 09070/09 18:46 SW46 8200B K2C 90848 Xylenes, total ND mg/kg dry 0.00538 1 09070/09 18:46 SW46 8200B K2C 90848 Xylenes, total ND mg/kg dry 0.00538 1 09070/09 18:46 SW46 8200B K2C 90848 Surr: 1.2-Dichloroethane-d4 (67-138%) 87% SW46 8200B M2C 90840 Surr: Dibromofluoromethame (75-125%) 93 % 93 % 92 % 90840 SURP (87-139%) 92 % 92 % 92 % 92 % 92 % 92 % 92 % 9	· · · · · · · · · · · · · · · · · · ·			mg/kg dry	0.00215	1	09/07/09 18:46	SW846 8260B	KxC	9084866
Xylenes, total ND mg/kg dry 0.00538 1 0907/09 18:46 SW846 82008 KxC 90848 Surr. 1.2-Dichloroethane-44 (67-138%) 87 % 0907/09 18:46 SW846 82008 KxC 90944 Surr. 2-Dichloroethane (75-125%) 93 % 0907/09 18:46 SW846 82008 KxC 90944 Surr. Totheroethane (75-125%) 93 % 0907/09 18:46 SW846 82008 KxC 90944 Surr. Totheroethane (75-125%) 92 % 0907/09 18:46 SW846 82008 KxC 90944 Surr. Totheroethane (75-125%) 93 % 0007/09 18:46 SW846 82008 KxC 90844 Surr. Totheroethane (75-125%) 9095/09 18:46 SW846 82008 KxC 90844 Surr. Totheroethane (75-125%) 9095/09 18:46 SW846 82008 KxC 90844 Surr. Totheroethane (75-125%) 9095/09 18:46 SW846 82008 9095/09 18:46 SW846	Naphthalene	ND		mg/kg dry	0.00538	1	09/07/09 18:46	SW846 8260B	KxC	9084866
Surr: 1,2-Dichloroethane-d4 (67-138%) 87 % MXC 90840 Surr. Dibromofluoromethane (75-125%) 93 % MXC 90840 MXC 9						1	09/07/09 18:46	SW846 8260B	KxC	9084866
Surr: Dibromofluoromethane (75-125%) 93 %	Xylenes, total	ND		mg/kg dry	0.00538	1	09/07/09 18:46	SW846 8260B	KxC	9084866
Surr: Toluene-d8 (76-129%) 92 % 09/07/09 18:46 SW846 8260B KxC 90844	Surr: 1,2-Dichloroethane-d4 (67-138%)	87 %					09/07/09 18:46	SW846 8260B	KxC	908486
Surr: Toluene-d8 (76-129%) 92 % 09/07/09 18:46 \$38946 82608 KxC 90844 Surr: 4-Bromofluorobensene (67-147%) 100 % 88846 82700 18:46 \$88946 82608 KxC 90846 Polyaromatic Hydrocarbons by EPA 8270D ND mg/kg dry 0.0701 1 09/10/90 55:9 \$8846 8270D jif 90905-8 Acenaphthene ND mg/kg dry 0.0701 1 09/10/90 55:9 \$8846 8270D jif 90905-8 Acenaphthylene ND mg/kg dry 0.0701 1 09/10/90 55:9 \$8846 8270D jif 90905-8 Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/90 55:5 \$8846 8270D jif 90905-8 Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/90 55:5 \$8846 8270D jif 90905-8 Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/90 55:5 \$8846 8270D jif 90905-9 Benzo (b) fluoranthene ND mg/kg dry <td< td=""><td>Surr: Dibromofluoromethane (75-125%)</td><td>93 %</td><td></td><td></td><td></td><td></td><td>09/07/09 18:46</td><td>SW846 8260B</td><td>KxC</td><td>908486</td></td<>	Surr: Dibromofluoromethane (75-125%)	93 %					09/07/09 18:46	SW846 8260B	KxC	908486
Surr: 4-Bromofluorobenzene (67-147%) 100 % KxC 90848 Polyaromatic Hydrocarbons by EPA 8270D Acenaphthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Acenaphthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (a) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) fluoranthene ND mg/kg dry	Surr: Toluene-d8 (76-129%)	92 %					09/07/09 18:46	SW846 8260B	KxC	908486
Polyaromatic Hydrocarbons by EPA 8270D	Surr: 4-Bromofluorobenzene (67-147%)	100 %					09/07/09 18:46	SW846 8260B		908486
Acenaphthylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (a) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (g),h,i) perylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Naphthalene ND mg/kg dry 0.0	Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Benzo (a) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Chrysene ND	Acenaphthene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	ilf	9090545
Anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (g,h.i) perylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Fluoranthrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905- Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW8	Acenaphthylene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	_	9090545
Benzo (a) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (a) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jif 90905 Fluoranthene	Anthracene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Benzo (a) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (g,h,i) perylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Indeno (1,2,3-ed) pyrene	Benzo (a) anthracene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	•	9090545
Benzo (b) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (g,h,i) perylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Naphthalene	Benzo (a) pyrene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	•	9090545
Benzo (g,h,i) perylene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jjf 90905 Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Pyrene ND	Benzo (b) fluoranthene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D		9090545
Benzo (k) fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 1-Methylnaphthalene ND	Benzo (g,h,i) perylene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	•	9090545
Chrysene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Dibenz (a,h) anthracene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 2-Methylnaphthalene ND mg/kg dry <td>Benzo (k) fluoranthene</td> <td>ND</td> <td></td> <td>mg/kg dry</td> <td>0.0701</td> <td>1</td> <td>09/10/09 05:59</td> <td>SW846 8270D</td> <td>-</td> <td>9090545</td>	Benzo (k) fluoranthene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Fluoranthene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. Phenanthrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905. I-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905.	Chrysene	ND		mg/kg dry	0.0701	i	09/10/09 05:59	SW846 8270D	-	9090545
Fluoranthene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Fluorene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Naphthalene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Phenanthrene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Pyrene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Pyrene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 I-Methylnaphthalene ND mg/kg dry 0.0701 I 09/10/09 05:59 SW846 8270D j1f 909056 Surr: Terphenyl-d14 (18-120%) 61 % Surr: 2-Fluorobiphenyl (14-120%) 53 % Sw846 8270D j1f 909056	Dibenz (a,h) anthracene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	ilf	9090545
Fluorene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND Mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND Mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND Mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND Mg/kg dry 0.0701 Naphthalene ND Mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D j1f 909050 Naphthalene ND Mg/kg dry 0.0701 Naphthalene ND Mg/kg	Fluoranthene	ND		mg/kg dry	0.0701	i	09/10/09 05:59	SW846 8270D		9090545
Indeno (1,2,3-cd) pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Phenanthrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 1-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 2-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Surr: Terphenyl-d14 (18-120%) 61 % 09/10/09 05:59 SW846 8270D jlf 909052 Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 909052	Fluorene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Naphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Phenanthrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 1-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 2-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909052 Surr: Terphenyl-dl4 (18-120%) 61 % 09/10/09 05:59 SW846 8270D jlf 909052 Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 909052	Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Phenanthrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 1-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 2-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 90905 Surr: Terphenyl-d14 (18-120%) 61 % 09/10/09 05:59 SW846 8270D jlf 90905 Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 90905	Naphthalene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Pyrene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909050 1-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909050 2-Methylnaphthalene ND mg/kg dry 0.0701 1 09/10/09 05:59 SW846 8270D jlf 909050 Surr: Terphenyl-d14 (18-120%) 61 % 09/10/09 05:59 SW846 8270D jlf 909050 Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 909050	Phenanthrene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	•	9090545
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Pyrene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1-Methylnaphthalene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	-	9090545
Surr: Terphenyl-d14 (18-120%) 61 % 09/10/09 05:59 SW846 8270D jlf 90903 Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 90903	2-Methylnaphthalene	ND		mg/kg dry	0.0701	1	09/10/09 05:59	SW846 8270D	•	9090545
Surr: 2-Fluorobiphenyl (14-120%) 53 % 09/10/09 05:59 SW846 8270D jlf 90905	Surr: Terphenyl-d14 (18-120%)	61 %					09/10/09 05:59	SW846 8270D	,	909054
	Surr: 2-Fluorobiphenyl (14-120%)	53 %					09/10/09 05:59	SW846 8270D		909054
	Surr: Nitrobenzene-d5 (17-120%)	46 %					09/10/09 05:59			909054





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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

ANALYTICAL REPORT

					Dilution	Analysis			
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-02 (1225 Do	ove - Soil) Samı	oled: 08/2	5/09 15:30						
General Chemistry Parameters									
% Dry Solids	93.2		%	0.500	1	09/10/09 11:04	SW-846	AJK	9091140
Selected Volatile Organic Compounds	by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00231	1	09/07/09 19:17	SW846 8260B	KxC	9084866
Ethylbenzene	ND		mg/kg dry	0.00231	1	09/07/09 19:17	SW846 8260B	KxC	9084866
Naphthalene	ND		mg/kg dry	0.00578	1	09/07/09 19:17	SW846 8260B	KxC	9084866
Toluene	ND		mg/kg dry	0.00231	1	09/07/09 19:17	SW846 8260B	KxC	9084866
Xylenes, total	ND		mg/kg dry	0.00578	1	09/07/09 19:17	SW846 8260B	KxC	9084866
Surr: 1,2-Dichloroethane-d4 (67-138%)	90 %					09/07/09 19:17	SW846 8260B	KxC	9084866
Surr: Dibromofluoromethane (75-125%)	94 %					09/07/09 19:17	SW846 8260B	KxC	9084866
Surr: Toluene-d8 (76-129%)	93 %					09/07/09 19:17	SW846 8260B	KxC	9084866
Surr: 4-Bromofluorobenzene (67-147%)	103 %					09/07/09 19:17	SW846 8260B	KxC	9084866
Polyaromatic Hydrocarbons by EPA 8	270D								
Acenaphthene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	ilf	9090545
Acenaphthylene	ND		mg/kg dry	0.0702	i	09/10/09 17:56	SW846 8270D	jlf	9090545
Anthracene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Benzo (a) anthracene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Benzo (a) pyrene	ND		mg/kg dry	0.0702	ì	09/10/09 17:56	SW846 8270D	jlf	9090545
Benzo (b) fluoranthene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Benzo (k) fluoranthene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Chrysene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Fluoranthene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Fluorene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Naphthalene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Phenanthrene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Pyrene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
1-Methylnaphthalene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
2-Methylnaphthalene	ND		mg/kg dry	0.0702	1	09/10/09 17:56	SW846 8270D	jlf	9090545
Surr: Terphenyl-d14 (18-120%)	57 %					09/10/09 17:56	SW846 8270D	jlf	9090545
Surr: 2-Fluorobiphenyl (14-120%)	56 %					09/10/09 17:56	SW846 8270D	jlf	9090545
Surr: Nitrobenzene-d5 (17-120%)	54 %					09/10/09 17:56	SW846 8270D	jlf	9090545





Client

Attn

EEG - Small Business Group, Inc. (2449)

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

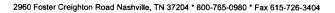
Project Number: [none]

Received:

08/28/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-03 (1223 C	ardinal - Soil) S	Sampled:	08/25/09 10:30						
General Chemistry Parameters									
% Dry Solids	80.3		%	0.500	1	09/10/09 11:04	SW-846	AJK	9091140
•	- h EDA M-4h 4	02C0D						71310	,,,,,,,,
Selected Volatile Organic Compound	•	8200B							
Benzene	ND		mg/kg dry	0.00231	1	09/07/09 19:47	SW846 8260B	KxC	9084866
Ethylbenzene	ND		mg/kg dry	0.00231	1	09/07/09 19:47	SW846 8260B	KxC	9084866
Naphthalene	ND		mg/kg dry	0.00578	1	09/07/09 19:47	SW846 8260B	KxC	9084866
Toluene	ND		mg/kg dry	0.00231	1	09/07/09 19:47	SW846 8260B	KxC	9084866
Xylenes, total	ND		mg/kg dry	0.00578	1	09/07/09 19:47	SW846 8260B	KxC	9084866
Surr: 1,2-Dichloroethane-d4 (67-138%)	90 %					09/07/09 19:47	SW846 8260B	KxC	9084866
Surr: Dibromofluoromethane (75-125%)	94 %					09/07/09 19:47	SW846 8260B	KxC	9084866
Surr: Toluene-d8 (76-129%)	99 %					09/07/09 19:47	SW846 8260B	KxC	9084866
Surr: 4-Bromofluorobenzene (67-147%)	127 %					09/07/09 19:47	SW846 8260B	KxC	9084866
Polyaromatic Hydrocarbons by EPA 8	3270 D								
Acenaphthene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Acenaphthylene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Anthracene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Benzo (a) anthracene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Benzo (a) pyrene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Benzo (b) fluoranthene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
Benzo (k) fluoranthene	ND		mg/kg dry	0.0824	ı	09/10/09 21:32	SW846 8270D	ilf	9090545
Chrysene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0824	i	09/10/09 21:32	SW846 8270D	jlf	9090545
Fluoranthene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
Fluorene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0824	I	09/10/09 21:32	SW846 8270D	ilf	9090545
Naphthalene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
Phenanthrene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Pyrene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	ilf	9090545
l-Methylnaphthalene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
2-Methylnaphthalene	ND		mg/kg dry	0.0824	1	09/10/09 21:32	SW846 8270D	jlf	9090545
Surr: Terphenyl-d14 (18-120%)	53 %		-667		•	09/10/09 21:32	SW846 8270D	jif jlf	9090545
Surr: 2-Fluorobiphenyl (14-120%)	50 %					09/10/09 21:32	SW846 8270D	jij jlf	9090545
Surr: Nitrobenzene-d5 (17-120%)	46 %					09/10/09 21:32			
Jan . 1411 OJEHZENE-UJ (17-12070)	70 /0					09/10/09 21:32	SW846 8270D	jlf	9090545





10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

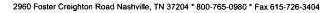
Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

Analyte	D14	T73	TT. *4:	MRL	Dilution Factor	Analysis Date/Time	Method	Amalus	Do4.1	
Analyte	Result	Flag	Units	MIKL	ractor	Date/Time	Method	Analyst	Baten	
Sample ID: NSH2536-04 (1224 C	ardinal - Soil) S	Sampled: (08/25/09 09:20							
General Chemistry Parameters										
% Dry Solids	79.4		%	0.500	1	09/10/09 11:04	SW-846	AJK	909114	
Selected Volatile Organic Compound	s by EPA Method	l 8260B								
Benzene	ND	RL1	mg/kg dry	0.117	50	09/07/09 18:15	SW846 8260B	KxC	908486	
Ethylbenzene	ND	RL1	mg/kg dry	0.117	50	09/07/09 18:15	SW846 8260B	KxC	908486	
Naphthalene	0.00743		mg/kg dry	0.00586	1	09/07/09 17:45	SW846 8260B	KxC	908486	
Toluene	0.207		mg/kg dry	0.117	50	09/07/09 18:15	SW846 8260B	KxC	908486	
Xylenes, total	ND	RLI	mg/kg dry	0.294	50	09/07/09 18:15	SW846 8260B	KxC	908486	
Surr: 1,2-Dichloroethane-d4 (67-138%)	122 %					09/07/09 17:45	SW846 8260B	KxC	908486	
Surr: 1,2-Dichloroethane-d4 (67-138%)	81 %					09/07/09 18:15	SW846 8260B	KxC	908486	
Surr: Dibromofluoromethane (75-125%)	117%					09/07/09 17:45	SW846 8260B	KxC	908486	
Surr: Dibromofluoromethane (75-125%)	88 %					09/07/09 18:15	SW846 8260B	KxC	908486	
Surr: Toluene-d8 (76-129%)	167 %	ZX				09/07/09 17:45	SW846 8260B	KxC	908480	
Surr: Toluene-d8 (76-129%)	92 %					09/07/09 18:15	SW846 8260B	KxC	908486	
Surr: 4-Bromofluorobenzene (67-147%)	155 %	ZX				09/07/09 17:45	SW846 8260B	KxC	908486	
Surr: 4-Bromofluorobenzene (67-147%)	109 %					09/07/09 18:15	SW846 8260B	KxC	908486	
Polyaromatic Hydrocarbons by EPA 8	3270D									
Acenaphthene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Acenaphthylene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Anthracene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Benzo (a) anthracene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Benzo (a) pyrene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Benzo (b) fluoranthene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Benzo (g,h,i) perylene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Benzo (k) fluoranthene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Chrysene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054:	
Dibenz (a,h) anthracene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Fluoranthene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054	
Fluorene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D SW846 8270D	jlf	909054	
Indeno (1,2,3-cd) pyrene	ND ND		mg/kg dry	4.17	50 50	09/11/09 21:54 09/11/09 21:54	SW846 8270D	jlf	909054	
Naphthalene Phenanthrene	ND ND		mg/kg dry mg/kg dry	4.17 4.17	50	09/11/09 21:54	SW846 8270D	jlf	909054:	
Pyrene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jl f	909054	
r-yrene 1-Methylnaphthalene	ND ND		mg/kg dry	4.17 4.17	50	09/11/09 21:54	SW846 8270D	jl f :1£	909054	
2-Methylnaphthalene	ND		mg/kg dry	4.17	50	09/11/09 21:54	SW846 8270D	jlf ilf	909054	
Surr: Terphenyl-d14 (18-120%)	3 %	ZX		4.17	20	09/11/09 21:54		•		
Surr: 2-Fluorobiphenyl (14-120%)	21 %	LA					SW846 8270D	jlf	909054	
* * * *						09/11/09 21:54	SW846 8270D	jlf	909054	
Surr: Nitrobenzene-d5 (17-120%)	59 %					09/11/09 21:54	SW846 8270D	jlf	909054	





10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

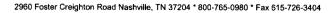
Work Order: NSH2536

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 08/28/09 08:00

Amalusta	.		** •	MDI	Dilution	Analysis	North - 3	A	D. ()
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-05 (1219 C	ardinal - Soil) S	ampled: (08/24/09 13:45						
General Chemistry Parameters									
% Dry Solids	83.0		%	0.500	1	09/10/09 11:04	SW-846	АЈК	9091140
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00217	1	09/07/09 15:41	SW846 8260B	KxC	9084866
Ethylbenzene	0.127		mg/kg dry	0.110	50	09/07/09 16:43	SW846 8260B	KxC	9084866
Naphthalene	0.0160		mg/kg dry	0.00542	1	09/07/09 15:41	SW846 8260B	KxC	9084866
Toluene	1.67		mg/kg dry	0.110	50	09/07/09 16:43	SW846 8260B	KxC	9084866
Xylenes, total	0.568		mg/kg dry	0.276	50	09/07/09 16:43	SW846 8260B	KxC	9084866
Surr: 1,2-Dichloroethane-d4 (67-138%)	134 %					09/07/09 15:41	SW846 8260B	KxC	908486
Surr: 1,2-Dichloroethane-d4 (67-138%)	82 %					09/07/09 16:43	SW846 8260B	KxC	908486
Surr: Dibromofluoromethane (75-125%)	121 %					09/07/09 15:41	SW846 8260B	KxC	908486
Surr: Dibromofluoromethane (75-125%)	89 %					09/07/09 16:43	SW846 8260B	KxC	908486
Surr: Toluene-d8 (76-129%)	215 %	ZX				09/07/09 15:41	SW846 8260B	KxC	908486
Surr: Toluene-d8 (76-129%)	99 %					09/07/09 16:43	SW846 8260B	KxC	908486
Surr: 4-Bromofluorobenzene (67-147%)	259 %	ZX				09/07/09 15:41	SW846 8260B	KxC	908486
Surr: 4-Bromofluorobenzene (67-147%)	106 %					09/07/09 16:43	SW846 8260B	KxC	908486
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Acenaphthylene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Anthracene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Benzo (a) anthracene	0.394		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Benzo (a) pyrene	0.383		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Benzo (b) fluoranthene	0.525		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Benzo (g,h,i) perylene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	909054
Benzo (k) fluoranthene	0.358		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	909054
Chrysene	0.642		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	909054:
Dibenz (a,h) anthracene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Fluoranthene	0.778		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	909054
Fluorene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	909054:
Naphthalene	ND		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D	jlf	9090545
Phenanthrene	ND 0.956		mg/kg dry	0.320	2	09/10/09 22:20	SW846 8270D SW846 8270D	jlf	9090545
Pyrene	0.956 ND		mg/kg dry	0.320 0.320	2 2	09/10/09 22:20	SW846 8270D SW846 8270D	jlf	909054
1-Methylnaphthalene	ND ND		mg/kg dry mg/kg dry	0.320	2	09/10/09 22:20 09/10/09 22:20	SW846 8270D	jlf :16	909054:
2-Methylnaphthalene			mg/kg ury	0.320	2			jlf	
Surr: Terphenyl-d14 (18-120%)	19 %					09/10/09 22:20	SW846 8270D	jlf	909054
Surr: 2-Fluorobiphenyl (14-120%)	26 %					09/10/09 22:20	SW846 8270D	jlf	909054
Surr: Nitrobenzene-d5 (17-120%)	47 %					09/10/09 22:20	SW846 8270D	jlf	909054





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

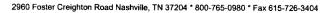
Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

					Dilution	Analysis			
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-06 (1218 Car	rdinal - Soil) S	ampled:	08/24/09 11:55						
General Chemistry Parameters									
% Dry Solids	87.6		%	0.500	1	09/10/09 11:04	SW-846	АЈК	9091140
Selected Volatile Organic Compounds	by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00209	1	09/07/09 13:44	SW846 8260B	CMM	9091127
Ethylbenzene	ND		mg/kg dry	0.00209	1	09/07/09 13:44	SW846 8260B	CMM	9091127
Naphthalene	0.0111	В	mg/kg dry	0.00523	1	09/07/09 13:44	SW846 8260B	CMM	9091127
Toluene	ND		mg/kg dry	0.00209	1	09/07/09 13:44	SW846 8260B	CMM	9091127
Xylenes, total	ND		mg/kg dry	0.00523	1	09/07/09 13:44	SW846 8260B	CMM	9091127
Surr: 1,2-Dichloroethane-d4 (67-138%)	85 %					09/07/09 13:44	SW846 8260B	СММ	9091127
Surr: Dibromofluoromethane (75-125%)	95 %					09/07/09 13:44	SW846 8260B	СММ	9091127
Surr: Toluene-d8 (76-129%)	101 %					09/07/09 13:44	SW846 8260B	СММ	9091127
Surr: 4-Bromofluorobenzene (67-147%)	135 %					09/07/09 13:44	SW846 8260B	СММ	9091127
Polyaromatic Hydrocarbons by EPA 82	270D								
Acenaphthene	ND		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Acenaphthylene	ND		mg/kg dry	0.375	i	09/10/09 22:44	SW846 8270D	jlf	9090545
Anthracene	0.685		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Benzo (a) anthracene	5.47		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Benzo (a) pyrene	2.38		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Benzo (b) fluoranthene	3.46		mg/kg dry	0.375	ı	09/10/09 22:44	SW846 8270D	jlf	9090545
Benzo (g,h,i) perylene	3.21		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Benzo (k) fluoranthene	2.54		mg/kg dry	0.375	i	09/10/09 22:44	SW846 8270D	jlf	9090545
Chrysene	5.13		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Dibenz (a,h) anthracene	0.751		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Fluoranthene	9.33		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Fluorene	ND		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Indeno (1,2,3-cd) pyrene	2.53		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Naphthalene	ND		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Phenanthrene	2.32		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
Pyrene	6.65		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	jlf	9090545
1-Methylnaphthalene	ND		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
2-Methylnaphthalene	ND		mg/kg dry	0.375	1	09/10/09 22:44	SW846 8270D	ilf	9090545
Surr: Terphenyl-d14 (18-120%)	332 %	ZX				09/10/09 22:44	SW846 8270D	jlf	9090545
Surr: 2-Fluorobiphenyl (14-120%)	320 %	ZX				09/10/09 22:44	SW846 8270D	jlf	9090545
Surr: Nitrobenzene-d5 (17-120%)	294 %	ZX				09/10/09 22:44	SW846 8270D	jlf	9090545





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

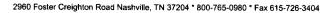
Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Analust	Dotal
					Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-07 (1215 Ca	ardinal - Soil) S	ampled:	08/24/09 10:30						
General Chemistry Parameters									
% Dry Solids	88.6		%	0.500	1	09/10/09 11:04	SW-846	AJK	9091140
Selected Volatile Organic Compounds	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00247	1	09/07/09 16:12	SW846 8260B	KxC	9084866
Ethylbenzene	ND		mg/kg dry	0.00247	1	09/07/09 16:12	SW846 8260B	KxC	9084866
Naphthalene	0.0521		mg/kg dry	0.00617	1	09/07/09 16:12	SW846 8260B	KxC	9084866
Toluene	ND		mg/kg dry	0.00247	1	09/07/09 16:12	SW846 8260B	KxC	9084866
Xylenes, total	ND		mg/kg dry	0.00617	1	09/07/09 16:12	SW846 8260B	KxC	9084866
Surr: 1,2-Dichloroethane-d4 (67-138%)	94 %					09/07/09 16:12	SW846 8260B	KxC	908486
Surr: Dibromofluoromethane (75-125%)	96 %					09/07/09 16:12	SW846 8260B	KxC	908486
Surr: Toluene-d8 (76-129%)	114 %					09/07/09 16:12	SW846 8260B	KxC	908486
Surr: 4-Bromofluorobenzene (67-147%)	149 %	ZX				09/07/09 16:12	SW846 8260B	KxC	908486
Polyaromatic Hydrocarbons by EPA 8	3270D								
Acenaphthene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Acenaphthylene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Anthracene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Benzo (a) anthracene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jl f	9090545
Benzo (a) pyrene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Benzo (b) fluoranthene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Benzo (g,h,i) perylene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Benzo (k) fluoranthene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Chrysene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Dibenz (a,h) anthracene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Fluoranthene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Fluorene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Naphthalene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Phenanthrene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Pyrene	ND		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
l-Methylnaphthalene	4.82		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
2-Methylnaphthalene	7.04		mg/kg dry	0.746	10	09/11/09 22:17	SW846 8270D	jlf	9090545
Surr: Terphenyl-d14 (18-120%)	119 %					09/11/09 22:17	SW846 8270D	jlf	909054.
Surr: 2-Fluorobiphenyl (14-120%)	115 %					09/11/09 22:17	SW846 8270D	jlf	909054.
Surr: Nitrobenzene-d5 (17-120%)	112 %					09/11/09 22:17	SW846 8270D	ilf	909054.





10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

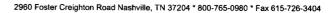
Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

		·			Dilution	Analysis			
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NSH2536-08 (1214 C	ardinal - Soil) S	ampled:	08/24/09 10:15						
General Chemistry Parameters									
% Dry Solids	88.7		%	0.500	1	09/10/09 11:04	SW-846	AJK	9091140
Selected Volatile Organic Compound	s by EPA Method	8260B							
Benzene	ND		mg/kg dry	0.00241	1	09/07/09 14:47	SW846 8260B	СММ	9091127
Ethylbenzene	ND		mg/kg dry	0.00241	i	09/07/09 14:47	SW846 8260B	CMM	9091127
Naphthalene	ND		mg/kg dry	0.00602	i	09/07/09 14:47	SW846 8260B	CMM	9091127
Toluene	ND		mg/kg dry	0.00241	1	09/07/09 14:47	SW846 8260B	CMM	9091127
Xylenes, total	ND		mg/kg dry	0.00602	1	09/07/09 14:47	SW846 8260B	CMM	9091127
Surr: 1,2-Dichloroethane-d4 (67-138%)	89 %		<i>3</i> ··· <i>9</i> ··· <i>9</i>		-	09/07/09 14:47	SW846 8260B	CMM	9091127
Surr: Dibromofluoromethane (75-125%)	95 %								
•						09/07/09 14:47	SW846 8260B	СММ	9091127
Surr: Toluene-d8 (76-129%)	103 %					09/07/09 14:47	SW846 8260B	СММ	9091127
Surr: 4-Bromofluorobenzene (67-147%)	135 %					09/07/09 14:47	SW846 8260B	СММ	9091127
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Acenaphthylene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Anthracene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Benzo (a) anthracene	ND		mg/kg dry	0.0747	I	09/10/09 23:32	SW846 8270D	jlf	9090545
Benzo (a) pyrene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Benzo (b) fluoranthene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Benzo (g,h,i) perylene	0.212		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Benzo (k) fluoranthene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Chrysene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Fluoranthene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Fluorene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Indeno (1,2,3-cd) pyrene	0.192		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Naphthalene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
Phenanthrene	ND		mg/kg dry	0.0747	i	09/10/09 23:32	SW846 8270D	jlf	9090545
Pyrene	ND		mg/kg dry	0.0747	ì	09/10/09 23:32	SW846 8270D	jlf	9090545
1-Methylnaphthalene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	jlf	9090545
2-Methylnaphthalene	ND		mg/kg dry	0.0747	1	09/10/09 23:32	SW846 8270D	ilf	9090545
Surr: Terphenyl-d14 (18-120%)	72 %					09/10/09 23:32	SW846 8270D	jlf	9090545
Surr: 2-Fluorobiphenyl (14-120%)	70 %					09/10/09 23:32	SW846 8270D	jlf	9090545
Surr: Nitrobenzene-d5 (17-120%)	75 %					09/10/09 23:32	SW846 8270D	jlf	9090545





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

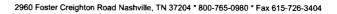
Project Number: [none]

Received:

08/28/09 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA	A 8270D						
SW846 8270D	9090545	NSH2536-01	30.22	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-02	30.73	00.1	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-03	30.39	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-04	30.36	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-04RE1	30.36	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-05	30.31	2.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-06	30.57	5.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-07	30.40	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-07RE1	30.40	1.00	09/05/09 09:00	AJF	EPA 3550C
SW846 8270D	9090545	NSH2536-08	30.33	1.00	09/05/09 09:00	AJF	EPA 3550C
Selected Volatile Organic Compour	nds by EPA Method	8260B					
SW846 8260B	9084866	NSH2536-01	4.90	5.00	08/25/09 15:00	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-02	4.64	5.00	08/25/09 15:30	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-03	5.39	5.00	08/25/09 10:30	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-04	3.55	5.00	08/25/09 09:20	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-04RE1	5.37	5.00	08/25/09 09:20	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-04RE2	5.36	5.00	08/25/09 09:20	СНН	EPA 5035
SW846 8260B	9091127	NSH2536-05	5.78	5.00	08/24/09 13:45	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-05RE1	5.56	5.00	08/24/09 13:45	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-05RE2	5.46	5.00	08/24/09 13:45	СНН	EPA 5035
SW846 8260B	9091127	NSH2536-06	5.46	5.00	08/24/09 11:55	СНН	EPA 5035
SW846 8260B	9091127	NSH2536-07	4.73	5.00	08/24/09 10:30	СНН	EPA 5035
SW846 8260B	9084866	NSH2536-07RE1	4.57	5.00	08/24/09 10:30	СНН	EPA 5035
SW846 8260B	9091127	NSH2536-08	4.68	5.00	08/24/09 10:15	СНН	EPA 5035





Client

Attn

EEG - Small Business Group, Inc. (2449)

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 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				
9084866-BLK1						
Benzene	< 0.000670		mg/kg wet	9084866	9084866-BLK1	09/07/09 15:10
Ethylbenzene	< 0.000670		mg/kg wet	9084866	9084866-BLK1	09/07/09 15:10
Naphthalene	< 0.00170		mg/kg wet	9084866	9084866-BLK1	09/07/09 15:10
Toluene	< 0.000400		mg/kg wet	9084866	9084866-BLK1	09/07/09 15:10
Xylenes, total	< 0.00130		mg/kg wet	9084866	9084866-BLK1	09/07/09 15:10
Surrogate: 1,2-Dichloroethane-d4	104%			9084866	9084866-BLK1	09/07/09 15:10
Surrogate: Dibromofluoromethane	94%			9084866	9084866-BLK1	09/07/09 15:10
Surrogate: Toluene-d8	102%			9084866	9084866-BLK1	09/07/09 15:10
Surrogate: 4-Bromofluorobenzene	107%			9084866	9084866-BLK1	09/07/09 15:10
9091127-BLK1						
Benzene	< 0.000670		mg/kg wet	9091127	9091127-BLK1	09/07/09 12:40
Ethylbenzene	< 0.000670		mg/kg wet	9091127	9091127-BLK1	09/07/09 12:40
Naphthalene	0.00337	В	mg/kg wet	9091127	9091127-BLK1	09/07/09 12:40
Toluene	< 0.000400		mg/kg wet	9091127	9091127-BLK1	09/07/09 12:40
Xylenes, total	< 0.00130		mg/kg wet	9091127	9091127-BLK1	09/07/09 12:40
Surrogate: 1,2-Dichloroethane-d4	97%			9091127	9091127-BLK1	09/07/09 12:40
Surrogate: Dibromofluoromethane	100%			9091127	9091127-BLK1	09/07/09 12:40
Surrogate: Toluene-d8	103%			9091127	9091127-BLK1	09/07/09 12:40
Surrogate: 4-Bromofluorobenzene	124%			9091127	9091127-BLK1	09/07/09 12:40
Polyaromatic Hydrocarbons by E	EPA 8270D					
9090545-BLK1						
Acenaphthene	< 0.0320		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Acenaphthylene	< 0.0310		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Anthracene	< 0.0330		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Benzo (a) anthracene	< 0.0380		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Benzo (a) pyrene	< 0.0300		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Benzo (b) fluoranthene	< 0.0300		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Benzo (g,h,i) perylene	< 0.0300		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Benzo (k) fluoranthene	< 0.0300		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Chrysene	< 0.0400		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Dibenz (a,h) anthracene	< 0.0310		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Fluoranthene	< 0.0340		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Fluorene	< 0.0360		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Naphthalene	< 0.0410		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Phenanthrene	< 0.0340		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
Pyrene	< 0.0410		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
1-Methylnaphthalene	< 0.0320		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
2-Methylnaphthalene	< 0.0330		mg/kg wet	9090545	9090545-BLK1	09/10/09 04:26
						•



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

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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8	270D					,
9090545-BLK1						
Surrogate: Terphenyl-d14	71%			9090545	9090545-BLK1	09/10/09 04:26
Surrogate: 2-Fluorobiphenyl	60%			9090545	9090545-BLK1	09/10/09 04:26
Surrogate: Nitrobenzene-d5	49%			9090545	9090545-BLK1	09/10/09 04:26



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

Client

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

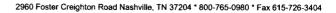
Received:

08/28/09 08:00

PROJECT QUALITY CONTROL DATA

Duplicate

and the second second				Duplicated	% Rec.	Date/Time
0	·	. 20	0001140	NGH2507 02		09/10/09 11:04
					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received: 08/28/09 08:00

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compou	nds by EPA Method 82	60B		-		•		
9084866-BS1	•							
Benzene	50.0	44.5		ug/kg	89%	78 - 126	9084866	09/07/09 13:40
Ethylbenzene	50.0	46.4		ug/kg	93%	79 - 130	9084866	09/07/09 13:40
Naphthalene	50.0	47.2		ug/kg	94%	72 - 150	9084866	09/07/09 13:40
Toluene	50.0	45.3		ug/kg	91%	76 - 126	9084866	09/07/09 13:40
Xylenes, total	150	138		ug/kg	92%	80 - 130	9084866	09/07/09 13:40
Surrogate: 1,2-Dichloroethane-d4	50.0	52.1			104%	67 - 138	9084866	09/07/09 13:40
Surrogate: Dibromosluoromethane	50.0	47.8			96%	75 - 125	9084866	09/07/09 13:40
Surrogate: Toluene-d8	50.0	50.5			101%	76 - 129	9084866	09/07/09 13:40
Surrogate: 4-Bromofluorobenzene	50.0	54.0			108%	67 - 147	9084866	09/07/09 13:40
9091127-BS1								
Benzene	50.0	52.8		ug/kg	106%	78 - 126	9091127	09/07/09 11:34
Ethylbenzene	50.0	59.7		ug/kg	119%	79 - 130	9091127	09/07/09 11:34
Naphthalene	50.0	52.3		ug/kg	105%	72 - 150	9091127	09/07/09 11:34
Toluene	50.0	57.5		ug/kg	115%	76 - 126	9091127	09/07/09 11:34
Xylenes, total	150	180		ug/kg	120%	80 - 130	9091127	09/07/09 11:34
Surrogate: 1,2-Dichloroethane-d4	50.0	47.3			95%	67 - 138	9091127	09/07/09 11:34
Surrogate: Dibromofluoromethane	50.0	49.6			99%	75 - 125	9091127	09/07/09 11:34
Surrogate: Toluene-d8	50.0	52.4			105%	76 - 129	9091127	09/07/09 11:34
Surrogate: 4-Bromofluorobenzene	50.0	45.6			91%	67 - 147	9091127	09/07/09 11:34
Polyaromatic Hydrocarbons by EP	A 8270D							
9090545-BS1								
Acenaphthene	1.67	1.28		mg/kg wet	77%	49 - 120	9090545	09/10/09 04:49
Acenaphthylene	1.67	1.29		mg/kg wet	77%	52 - 120	9090545	09/10/09 04:49
Anthracene	1.67	1.45		mg/kg wet	87%	58 - 120	9090545	09/10/09 04:49
Benzo (a) anthracene	1.67	1.33		mg/kg wet	80%	57 - 120	9090545	09/10/09 04:49
Benzo (a) pyrene	1.67	1.38		mg/kg wet	83%	55 - 120	9090545	09/10/09 04:49
Benzo (b) fluoranthene	1.67	1.46		mg/kg wet	88%	51 - 123	9090545	09/10/09 04:49
Benzo (g,h,i) perylene	1.67	1.31		mg/kg wet	79%	49 - 121	9090545	09/10/09 04:49
Benzo (k) fluoranthene	1.67	1.07		mg/kg wet	64%	42 - 129	9090545	09/10/09 04:49
Chrysene	1.67	1.32		mg/kg wet	79%	55 - 120	9090545	09/10/09 04:49
Dibenz (a,h) anthracene	1.67	1.34		mg/kg wet	80%	50 - 123	9090545	09/10/09 04:49
Fluoranthene	1.67	1.23		mg/kg wet	74%	58 - 120	9090545	09/10/09 04:49
Fluorene	1.67	1.29		mg/kg wet	77%	54 - 120	9090545	09/10/09 04:49
Indeno (1,2,3-cd) pyrene	1.67	1.33		mg/kg wet	80%	50 - 122	9090545	09/10/09 04:49
Naphthalene	1.67	1.14		mg/kg wet	68%	28 - 120	9090545	09/10/09 04:49
Phenanthrene	1.67	1.30		mg/kg wet	78%	56 - 120	9090545	09/10/09 04:49
Pyrene	1.67	1.33		mg/kg wet	80%	56 - 120	9090545	09/10/09 04:49
I-Methylnaphthalene	1.67	1.07		mg/kg wet	64%	36 - 120	9090545	09/10/09 04:49
2-Methylnaphthalene	1.67	1.09		mg/kg wet	66%	36 - 120	9090545	09/10/09 04:49



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

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

10179 Highway 78

Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

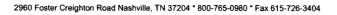
Project Number: [none]

Received:

08/28/09 08:00

PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 82	70 D							
9090545-BS1								
Surrogate: Terphenyl-d14	1.67	1.19			71%	18 - 120	9090545	09/10/09 04:49
Surrogate: 2-Fluorobiphenyl	1.67	1.06			63%	14 - 120	9090545	09/10/09 04:49
Surrogate: Nitrobenzene-d5	1.67	0.947			57%	17 - 120	9090545	09/10/09 04:49





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

10179 Highway 78 Ladson, SC 29456

Attn

Tom McElwee

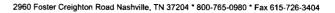
NSH2536 Work Order:

Laurel Bay Housing Project Project Name:

[none] Project Number: 08/28/09 08:00 Received:

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 Compo	unds by EPA	Method 820	60B									
9084866-BSD1												
Benzene		45.8		ug/kg	50.0	92%	78 - 126	3	50	9084866		09/07/09 13:07
Ethylbenzene		46.9		ug/kg	50.0	94%	79 - 130	i	50	9084866		09/07/09 13:07
Naphthalene		49.8		ug/kg	50.0	100%	72 - 150	5	50	9084866		09/07/09 13:07
Toluene		45.4		ug/kg	50.0	91%	76 - 126	0.3	50	9084866		09/07/09 13:07
Xylenes, total		139		ug/kg	150	93%	80 - 130	0.7	50	9084866		09/07/09 13:07
Surrogate: 1,2-Dichloroethane-d4		53.4		ug/kg	50.0	107%	67 - 138			9084866		09/07/09 13:07
Surrogate: Dibromofluoromethane		48.0		ug/kg	50.0	96%	75 - 125			9084866		09/07/09 13:07
Surrogate: Toluene-d8		49.5		ug/kg	50.0	99%	76 - 129			9084866		09/07/09 13:07
Surrogate: 4-Bromofluorobenzene		52.6		ug/kg	50.0	105%	67 - 147			9084866		09/07/09 13:07
9091127-BSD1												
Benzene		54.9		ug/kg	50.0	110%	78 - 126	4	50	9091127		09/07/09 11:03
Ethylbenzene		61.7		ug/kg	50.0	123%	79 - 130	3	50	9091127		09/07/09 11:03
Naphthalene		54.9		ug/kg	50.0	110%	72 - 150	5	50	9091127		09/07/09 11:03
Toluene		58.1		ug/kg	50.0	116%	76 - 126	1	50	9091127		09/07/09 11:03
Xylenes, total		186		ug/kg	150	124%	80 - 130	3	50	9091127		09/07/09 11:03
Surrogate: 1,2-Dichloroethane-d4		48.6		ug/kg	50.0	97%	67 - 138			9091127		09/07/09 11:03
Surrogate: Dibromofluoromethane		49.4		ug/kg	50.0	99%	75 - 125			9091127		09/07/09 11:03
Surrogate: Toluene-d8		52.1		ug/kg	50.0	104%	76 - 129			9091127		09/07/09 11:03
Surrogate: 4-Bromofluorobenzene		44.9		ug/kg	50.0	90%	67 - 147			9091127		09/07/09 11:03





10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

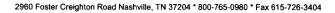
Project Number: [none]

Received:

08/28/09 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 Compo	unds by EPA Me	thod 8260B								
9084866-MS1										
Benzene	ND	2.21		mg/kg dry	2.76	80%	42 - 141	9084866	NSH2536-05RE 2	09/07/09 20:18
Ethylbenzene	0.127	2.42		mg/kg dry	2.76	83%	21 - 165	9084866	NSH2536-05RE 2	09/07/09 20:18
Naphthalene	0.678	2.72		mg/kg dry	2.76	74%	10 - 160	9084866	NSH2536-05RE 2	09/07/09 20:18
Toluene	1.67	2.39	M2	mg/kg dry	2.76	26%	45 - 145	9084866	NSH2536-05RE 2	09/07/09 20:18
Xylenes, total	0.568	7.05		mg/kg dry	8.27	78%	31 - 159	9084866	NSH2536-05RE 2	09/07/09 20:18
Surrogate: 1,2-Dichloroethane-d4		40.4		ug/kg	50.0	81%	67 - 138	9084866	NSH2536-05RE 2	09/07/09 20:18
Surrogate: Dibromosluoromethane		45.4		ug/kg	50.0	91%	75 - 125	9084866	NSH2536-05RE 2	09/07/09 20:18
Surrogate: Toluene-d8		47.9		ug/kg	50.0	96%	76 - 129	9084866	NSH2536-05RE 2	09/07/09 20:18
Surrogate: 4-Bromofluorobenzene		55.6		ug/kg	50.0	111%	67 - 147	9084866	NSH2536-05RE 2	09/07/09 20:18
9091127-MS1										
Benzene	ND	47.5		ug/kg	50.0	95%	42 - 141	9091127	NSH2536-08	09/07/09 17:49
Ethylbenzene	ND	53.9		ug/kg	50.0	108%	21 - 165	9091127	NSH2536-08	09/07/09 17:49
Naphthalene	5.06	26.0		ug/kg	50.0	42%	10 - 160	9091127	NSH2536-08	09/07/09 17:49
Toluene	0.437	54.7		ug/kg	50.0	109%	45 - 145	9091127	NSH2536-08	09/07/09 17:49
Xylenes, total	0.484	153		ug/kg	150	102%	31 - 159	9091127	NSH2536-08	09/07/09 17:49
Surrogate: 1,2-Dichloroethane-d4		43.9		ug/kg	50.0	88%	67 - 138	9091127	NSH2536-08	09/07/09 17:49
Surrogate: Dibromofluoromethane		49.4		ug/kg	50.0	99%	75 - 125	9091127	NSH2536-08	09/07/09 17:49
Surrogate: Toluene-d8		54.1		ug/kg	50.0	108%	76 - 129	9091127	NSH2536-08	09/07/09 17:49
Surrogate: 4-Bromofluorobenzene		50.4		ug/kg	50.0	101%	67 - 147	9091127	NSH2536-08	09/07/09 17:49





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH2536

Project Name:

Received:

Laurel Bay Housing Project

Project Number: [n

[none] 08/28/09 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 l	Method 82	60B								-	
9084866-MSD1	•											
Benzene	ND	2.23		mg/kg dry	2.76	81%	42 - 141	0.9	50	9084866	NSH2536-05R E2	09/07/09 20:49
Ethylbenzene	0.127	2.38		mg/kg dry	2.76	82%	21 - 165	2	50	9084866	NSH2536-05R E2	09/07/09 20:49
Naphthalene	0.678	2.75		mg/kg dry	2.76	75%	10 - 160	1	50	9084866	NSH2536-05R E2	09/07/09 20:49
Toluene	1.67	2.24	M2	mg/kg dry	2.76	21%	45 - 145	6	50	9084866	NSH2536-05R E2	09/07/09 20:49
Xylenes, total	0.568	6.84		mg/kg dry	8.27	76%	31 - 159	3	50	9084866	NSH2536-05R E2	09/07/09 20:49
Surrogate: 1,2-Dichloroethane-d4		40.8		ug/kg	50.0	82%	67 - 138			9084866	NSH2536-05R E2	09/07/09 20:49
Surrogate: Dibromofluoromethane		45.0		ug/kg	50.0	90%	75 - 125			9084866	NSH2536-05R E2	09/07/09 20:49
Surrogate: Toluene-d8		47.0		ug/kg	50.0	94%	76 - 129			9084866	NSH2536-05R E2	09/07/09 20:49
Surrogate: 4-Bromofluorobenzene		54.9		ug/kg	50.0	110%	67 - 147			9084866	NSH2536-05R E2	09/07/09 20:49
9091127-MSD1												
Benzene	ND	45.4		ug/kg	50.0	91%	42 - 141	5	50	9091127	NSH2536-08	09/07/09 18:20
Ethylbenzene	ND	46.5		ug/kg	50.0	93%	21 - 165	15	50	9091127	NSH2536-08	09/07/09 18:20
Naphthalene	4.65	25.3		ug/kg	50.0	41%	10 - 160	3	50	9091127	NSH2536-08	09/07/09 18:20
Toluene	0.402	48.6		ug/kg	50.0	96%	45 - 145	12	50	9091127	NSH2536-08	09/07/09 18:20
Xylenes, total	0.446	130		ug/kg	150	87%	31 - 159	16	50	9091127	NSH2536-08	09/07/09 18:20
Surrogate: 1,2-Dichloroethane-d4		44.4		ug/kg	50.0	89%	67 - 138			9091127	NSH2536-08	09/07/09 18:20
Surrogate: Dibromofluoromethane		50.0		ug/kg	50.0	100%	75 - 125			9091127	NSH2536-08	09/07/09 18:20
Surrogate: Toluene-d8		52.8		ug/kg	50.0	106%	76 - 129			9091127	NSH2536-08	09/07/09 18:20
Surrogate: 4-Bromofluorobenzene		57.7		ug/kg	50.0	115%	67 - 147			9091127	NSH2536-08	09/07/09 18:20



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

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

10179 Highway 78

Ladson, SC 29456 Tom McElwee Work Order:

NSH2536

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/28/09 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Attn

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



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

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

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSH2536

Project Name: Project Number: Laurel Bay Housing Project

Received:

[none] 08/28/09 08:00

DATA QUALIFIERS AND DEFINITIONS

В Analyte was detected in the associated Method Blank.

M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

RL1 Reporting limit raised due to sample matrix effects.

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

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

METHOD MODIFICATION NOTES

NSH2536

09/14/09 23 59

TestAmeri	CO	Nashville (2960 Foste Nashville, '	r Creight					Free:	800-7	726-01 765-09 726-34	BO						netho		his wor	k being	roper an					
Client Name/Account #:	EEG # 2449																		C	Complia	ance Mo	nitoring	1?	Yes		No
Address:	10179 Highway	78																		Enforc	ement	Action?		Yes		- No
City/State/Zlp:	Ladson, SC 294	56													Site	State:	SC							_		
Project Manager:	Tom McElwee e	mail: mcelwe	e@eeginc	.net												PO#:		78	ر کر د	7						
Telephone Number:	843.412.2097				F	ax No.:	8	<u>43</u>	8	79	-0	24c	7'		TA Qu	_										
Sampler Name: (Print)	Phon	# 3	Fha.				1								Proje	ct ID: I	aure	Bay H	ousing	Proiec	<u> </u>					
Sampler Signature:	- 16	128	//			./				/					Proj	oct #:										
						7,	Pre	servati	ive	2		Ma	trix						Aı	nalyze	For:				=	
Sample ID/Description 1/22) Dev/2 2/225 Dov/2 1/223 CARdinal 1/224 CARdinal 1/219 CARdinal 1/218 CARdinal 1/218 CARdinal 1/215 CARdinal 3/214 CARdinal	8/24/09 8/24/09 8/24/09 8/24/09 8/24/09	1345 1155 1030	Shipped X X X X X X X X X X X X X X X X X X X		Field Filtered	SOLUTION US UN INVOYMENTERNAIN		NaOH (Crange Label) H ₁ SO ₄ Plastic (Yellow Label)	H-5O ₄ Glass(Yellow Label)	2 (Groundwater	vvastewater Drinking Water	S X X X X X X X X X X X X X X X X X X X		W W W W W W BTEX + Napth - 82601											RUSH TAT (Pre-Schedule)
											\prod															寸
Special Instructions:	8/2	for	Time /9 6	,	eived b	- اک	/ / ,	,	ent:		T	Da	te	EDEX	Time		abor	-	erature	Upon f	Receipt: space?				,	Y
Relinfquished by:	Date		Time	Rece	eived b	y TestA	THE CICE	<u></u>				Q (129	B	Time										<u>.</u>	

ATTACHMENT A



NON-HAZARDOUS MANIFEST

CVAMBI (Form designed for use on elite (12-pitch) typewriter.) Please print or type. 1 Generator's US EPA ID No 2. Page NON-HAZARDOUS MANIFEST of 1 Generator's Name and Mailing Address
MCAS, Beauton
Laurel Bay Housing
Beauton SC 28904 10885420 WMNA B. State Generator's ID 843 228-8480 Generator's Phone Transporter 1 Company Name 6. US FPA ID Number C. State Transporter's ID D. Transporter's Phone 843 879 0411 Transporter 2 Company Name 8. US EPA ID Number F State Transporter's ID F. Transporter's Phone Designated Facility Name and Site Address US EPA ID Number G. State Facility's ID HICKORY HILL LANDFILL H. Facility's Phone ROUTE 1, BOX 121 843 967-4643 RIDGELAND SC 29936 11. Description of Waste Materials 12. Containers 13. Total Misc. Comments *Heating Oil Tank Blied with Sand 102655SC 0.0.1 WM Profile # GENERATOR WM Profile # WM Profile # WM Profile # K. Disposal Location Additional Descriptions for Materials Listed Above Landfill Solidification Cell Level **Bio Remediation** Special Handling Instructions and Additional Information 1224 CARDINAL from 1218 CARdiNA 1223 CARDINAL 1219 CARO Purchase Order # **EMERGENCY CONTACT:** 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. Printed/Typed Name Signature "On behalf of Month Day Year Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Month Day Signature Year omes Transporter 2 Acknowledgement of Receipt of Materials 18. Printed/Typed Name Signature Month Day Year 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. Facitilty Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest. 20. Printed/Typed Name Month Day Year

CWM - NHM - 1 - 5/97

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB1219TW01WG20150610

Laboratory ID: QF10006-019

Matrix: Aqueous

Date Sampled:06/10/2015 1525 Date Received: 06/12/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 5030B 06/16/2015 0559 PMM2 77325

	CAS	Analytical					
Parameter	Number	Method	Result	Q	LOQ	LOD	DL Units Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21 ug/L 1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21 ug/L 1
Naphthalene	91-20-3	8260B	0.17	J	5.0	0.96	0.14 ug/L 1
Toluene	108-88-3	8260B	0.42	J	5.0	0.48	0.24 ug/L 1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.19 ug/L 1

Run 1 Q % Recover	Acceptance ry Limits
84	75-120
92	70-120
89	85-120
89	85-115
	Q % Recover 84 92 89

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

S = MS/MSD failure

Shealy Environmental Services, Inc.

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1219TW01WG20150610

Laboratory ID: QF10006-019 Matrix: Aqueous

Date Sampled:06/10/2015 1525 Date Received: 06/12/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst Batch **Prep Date** 1 3520C 8270D (SIM) 06/19/2015 2302 RBH 06/17/2015 1058 77467

	CAS	Analytical					
Parameter	Number	Method	Result	Q	LOQ	LOD	DL Units Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.040	U	0.20	0.040	0.019 ug/L 1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.050	J	0.20	0.040	0.019 ug/L 1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024 ug/L 1
Chrysene	218-01-9	8270D (SIM)	0.050	J	0.20	0.040	0.021 ug/L 1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040 ug/L 1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		120	15-139
Fluoranthene-d10		48	23-154

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

S = MS/MSD failure

Shealy Environmental Services, Inc.

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

Appendix D Regulatory Correspondence





May 15, 2014

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for: See attached sheet

Dear Mr. Drawdy,

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

The Department has reviewed the referenced assessment reports. The submitted analytical results indicate that petroleum constituents are above established Risk-Based Screening Levels and additional investigation is warranted. Specifically, the Department requests that a groundwater sampling proposal be generated to determine if there has been an impact to groundwater at this site.

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

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

,



PROMOTE PROTECT PROSPER
Catherine B. Templeton, Director

Attachment to:

Krieg to Drawdy Subject: IGWA

Dated 5/15/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks)

137 Laurel Bay Tank 2	387 Acorn
139 Laurel Bay	392 Acorn Tank 2
229 Cypress Tank 2	396 Acorn Tank 1
261 Beech Tank 1 *	396 Acorn Tank 2
261 Beech Tank 3	430 Elderberry
273 Birch Tank 1	433 Elderberry
273 Birch Tank 2	439 Elderberry
273 Birch Tank 3	440 Elderberry
276 Birch Tank 2	442 Elderberry
278 Birch Tank 2	443 Elderberry
291 Birch Tank 2	444 Elderberry Tank 1
300 Ash	445 Elderberry
304 Ash *	446 Elderberry
314 Ash Tank 1	448 Elderberry
314 Ash Tank 2	449 Elderberry
322 Ash Tank 2 *	451 Elderberry
323 Ash	453 Elderberry
324 Ash *	456 Elderberry Tank 1
325 Ash Tank 1 *	456 Elderberry Tank 2
325 Ash Tank 2	458 Elderberry Tank 1
326 Ash •	458 Elderberry Tank 3
336 Ash	464 Dogwood
339 Ash	466 Dogwood
343 Ash Tank 1	467 Dogwood
344 Ash Tank 1	468 Dogwood
348 Ash *	469 Dogwood
349 Ash Tank 1 *	471 Dogwood Tank 2
353 Ash Tank 1 *	471 Dogwood Tank 3
362 Aspen *	475 Dogwood Tank 1
376 Aspen	475 Dogwood Tank 2
380 Aspen	516 Laurel Bay Tank 1 (UST#03747)
383 Aspen Tank 2 *	518 Laurel Bay

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks) cont.

531 Laurel Bay	1219 Cardinal	
532 Laurel Bay	1272 Albatross	
635 Dahlia Tank 2	1305 Eagle	
638 Dahlia	1353 Cardinal	
640 Dahlia Tank 1	1356 Cardinal	
640 Dahlia Tank 2	1357 Cardinal	
645 Dahlia	1359 Cardinal	
647 Dahlia	1360 Cardinal	
648 Dahlia Tank 2	1361 Cardinal	
650 Dahlia Tank 1	1368 Cardinal	
650 Dahlia Tank 2	1370 Cardinal Tank 1	
652 Dahlia Tank 1	1377 Dove	
652 Dahlia Tank 2	1381 Dove	
760 Althea	1382 Dove	
763 Althea	1384 Dove	
771 Althea	1385 Dove	
927 Albacore	1389 Dove	
1015 Foxglove	1391 Dove	
1046 Gardenia	1392 Dove	
1062 Gardenia Tank 2	1393 Dove Tank 1	
1070 Heather	1393 Dove Tank 2	
1072 Heather	1406 Eagle	
1102 Iris Tank 1	1407 Eagle Tank 1	
1107 Iris	1411 Eagle Tank 1	
1126 Iris	1411 Eagle Tank 2	
1129 Iris	1412 Eagle	
1132 Iris	1413 Albatross	
1133 Iris Tank 1	1414 Albatross	
1138 Iris	1422 Albatross	
1144 Iris Tank 1	1425 Albatross	
1144 Iris Tank 2	1426 Albatross	
1148 Iris Tank 1	1432 Dove	
1148 Iris Tank 2	1434 Dove	
1161 Jasmine	1436 Dove	
1167 Jasmine	1438 Dove Tank 1	
1170 Jasmine	1440 Dove	
1190 Bobwhite	1442 Dove Tank 1	
1192 Bobwhite		



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

February 22, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-May and June 2015

Laurel Bay Military Housing Area Multiple Properties

Dated October 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the addresses attached. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 52 stated addresses. For the remaining 91 addresses, there is no indication of contamination on the 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 Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus

LINA

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)

Shawn Dolan, Resolution Consultants (via email)

Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations

Dated February 22, 2016

Draft Final Initial Groundwater Investigation Report for (143 addresses)

273 Birch Drive	1192 Bobwhite Drive
325 Ash Street	1194 Bobwhite Drive
326 Ash Street	1272 Albatross Drive
336 Ash Street	1352 Cardinal Lane
343 Ash Street	1356 Cardinal Lane
353 Ash Street	1359 Cardinal Lane
430 Elderberry Drive	1360 Cardinal Lane
440 Elderberry Drive	1362 Cardinal Lane
456 Elderberry Drive	1370 Cardinal Lane
458 Elderberry Drive	1382 Dove Lane
468 Dogwood Drive	1384 Dove lane
518 Laurel Bay Blvd	1385 Dove Lane
635 Dahlia Drive	1389 Dove Lane
638 Dahlia Drive	1392 Dove Lane
640 Dahlia Drive	1393 Dove Lane
647 Dahlia Drive	1407 Eagle Lane
648 Dahlia Drive	1411 Eagle Lane
650 Dahlia Drive	1418 Albatross Drive
652 Dahlia Drive	1420 Albatross Drive
760 Althea Street	1426 Albatross Drive
1102 Iris Lane	1429 Albatross Drive
1132 Iris Lane	1434 Dove Lane
1133 Iris Lane	1436 Dove Lane
1144 Iris Lane	1440 Dove Lane
1148 Iris Lane	1442 Dove Lane
1186 Bobwhite Drive	1444 Dove Lane
No Fur	ther Action recommendation (91 addresses):
137 Laurel Bay Blvd	771 Althea Street
139 Laurel Bay Blvd	927 Albacore Street
229 Cypress Street	1015 Foxglove Street
261 Beech Street	1046 Gardenia Drive
276 Birch Drive	1062 Gardenia Drive
278 Birch Drive	1070 Heather Street
291 Birch Drive	1072 Heather Street

300 Ash Street	1107 Iris Lane	
304 Ash Street	1126 Iris Lane	
314 Ash Street	1129 Iris Lane	
322 Ash Street	1138 Iris Lane	
323 Ash Street	1161 Jasmine Street	
324 Ash Street	1167 Jasmine Street	
339 Ash Street	1170 Jasmine Street	
344 Ash Street	1190 Bobwhite Drive	
348 Ash Street	1219 Cardinal Lane	
349 Ash Street	1305 Eagle Lane	
362 Aspen Street	1353 Cardinal Lane	
376 Aspen Street	1354 Cardinal Lane	
380 Aspen Street	1357 Cardinal Lane	
383 Aspen Street	1361 Cardinal Lane	
387 Acorn Drive	1364 Cardinal Lane	
392 Acorn Drive	1368 Cardinal Lane	
396 Acorn Drive	1377 Dove Lane	
433 Elderberry Drive	1381 Dove Lane	
439 Elderberry Drive	1391 Dove Lane	
442 Elderberry Drive	1403 Eagle Lane	
443 Elderberry Drive	1404 Eagle Lane	
444 Elderberry Drive	1405 Eagle Lane	
445 Elderberry Drive	1406 Eagle Lane	
446 Elderberry Drive	1408 Eagle Lane	
448 Elderberry Drive	1410 Eagle Lane	
449 Elderberry Drive	1412 Eagle Lane	
451 Elderberry Drive	1413 Albatross Drive	7337
453 Elderberry Drive	1414 Albatross Drive	
464 Dogwood Drive	1417 Albatross Drive	
466 Dogwood Drive	1421 Albatross Drive	22.21
467 Dogwood Drive	1422 Albatross Drive	100
469 Dogwood Drive	1425 Albatross Drive	
471 Dogwood Drive	1427 Albatross Drive	
475 Dogwood Drive	1430 Dove Lane	
516 Laurel Bay Blvd	1432 Dove Lane	
531 Laurel Bay Blvd	1438 Dove Lane	
532 Laurel Bay Blvd	1453 Cardinal Lane	
645 Dahlia Drive	1455 Cardinal Lane	
763 Althea Street		

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015

Specific Property Recommendations Dated February 22, 2016, Page 2