SUMMARY REPORT
56 GARDENIA DRIVE (FORMERLY 1064 GARDENIA DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



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

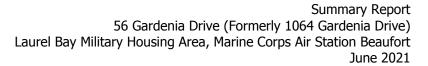
CTO WE52

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 56 Gardenia Drive (Formerly 1064 Gardenia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 56 Gardenia Drive (Formerly 1064 Gardenia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1064 Gardenia Drive* (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 – November and December 2015* (Resolution Consultants, 2016). 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 June 10, 2009, a single 280 gallon heating oil UST was removed from the rear patio area at 56 Gardenia Drive (Formerly 1064 Gardenia Drive). The former UST location is indicated in 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 5'7" 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 56 Gardenia Drive (Formerly 1064 Gardenia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 56 Gardenia Drive (Formerly 1064 Gardenia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On November 19, 2015, a temporary monitoring well was installed at 56 Gardenia Drive (Formerly 1064 Gardenia Drive), 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 in Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).



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 – November and December 2015* (Resolution Consultants, 2016).

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 56 Gardenia Drive (Formerly 1064 Gardenia Drive) 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.

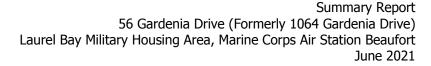
3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 56 Gardenia Drive (Formerly 1064 Gardenia Drive). This NFA determination was obtained in a letter dated June 8, 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 – 1064 Gardenia Drive, Laurel Bay Military Housing Area, September 2009.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.





- 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 56 Gardenia Drive (Formerly 1064 Gardenia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 06/10/09
Volatile Organic Compounds Analy	zed by EPA Method 8260B (mg/kg)	
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	0.0717
Toluene	0.627	ND
Xylenes, Total	13.01	0.0128
Semivolatile Organic Compounds A	Analyzed by EPA Method 8270D (mg/kg))
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL.

EPA - United States Environmental Protection Agency

mg/kg - 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

Table 2

Laboratory Analytical Results - Groundwater 56 Gardenia Drive (Formerly 1064 Gardenia Drive) 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 11/20/15
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	6.3
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	1.0
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270[) (μg/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

(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

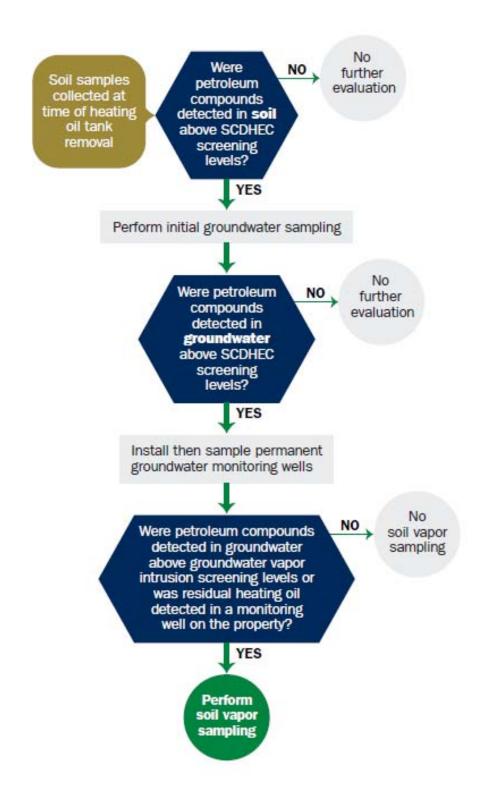
μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

⁽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).

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

RECEIVED

SEP 2 3 2009

SITE ASSESSMENT, REMEDIATION & REVITALIZATION

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. #	
<u>Facility Name or Company Site Identif</u>	ng Area, Marine Corps Air Station, Beaufort, SC fier
1064 Gardenia St., Laurel Street Address or State Road (as applic	Bay Military Housing Area cable)
Beaufort, City	Beaufort County
	County

Attachment 2

III. INSURANCE INFORMATION

	Insuran	ce Statement
qualify to receive state monies to pa	ny for appropriate s written confirmati	at Permit ID Number may site rehabilitation activities. Before participation is tion of the existence or non-existence of an environmental ompleted.
Is there now, or has there even UST release? YES No		nce policy or other financial mechanism that covers this ne)
If you answered YES	to the above ques	stion, please complete the following information:
The po	olicy provider is:_ olicy deductible is olicy limit is:	S:
If you have this type of insur	ance, please inclu	ade a copy of the policy with this report.
IV.	. REQUEST	FOR SUPERB FUNDING
I DO / DO NOT wish to p	participate in the S	SUPERB Program. (Circle one.)
V. CER	RTIFICATION	(To be signed by the UST owner)
I certify that I have personally ex	amined and am t	familiar with the information submitted in this and all iry of those individuals responsible for obtaining this ion 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	missioned outside	e South Carolina

1064 Gardenia				
eating oil				
30 gal		_		
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ceel				
id 1980s				
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)				
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10/09				
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	www.			
			Ì	
				or wastewaters removed from the USTs (a

VII. PIPING INFORMATION

	Gardenia	
	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	
<u>Corrosion and pitting were four</u>	d on the gurfage of t	he steel vent
pipe. Copper supply & return p		
	ping was sound. RIPTION AND HISTORY onstructed of single was	vall steel
viii. BRIEF SITE DESCI	ping was sound. RIPTION AND HISTORY onstructed of single was the second of the second control of the second	vall steel Ts were
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VIII. BRIEF SITE DESCE The USTs at the residences are cand formerly contained fuel oil	ping was sound. RIPTION AND HISTORY onstructed of single was the second of the second control of the second	vall steel Ts were

IX. SITE CONDITIONS

	Yes	<u>No</u>	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		X	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? *Mild odor noted in excavation. If yes, indicate location on site map and describe the odor (strong, mild, etc.)	X*		
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		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.		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
	Excav at		Candir	5'7"	6/10/09 1140 hrs	P. Shaw	
Gardenia	<u>rill ena</u>	2011	Sandy	5 7 "	1140 1115	P. Sllaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20			-				

^{* =} Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect <u>and</u> store the samples. Also include the preservative used for each sample. Please use the space provided below.

Sampling was performed in accordance with SC DHEC R.61-92 Part 280
and SC DHEC Assessment Guidelines. Sample containers were prepared by the
testing laboratory. The grab method was utilized to fill the sample
containers leaving as little head space as possible and immediately
capped. Soil samples were extracted from area below tank. The
samples were marked, logged, and immediately placed in a sample cooler
packed with ice to maintain an approximate temperature of 4 degrees
Centigrade. Tools were thoroughly cleaned and decontaminated with
the seven step decon process after each use. The samples remained in
custody of SBG-EEG, Inc. until they were transferred to Test America
Incorporated for analysis as documented in the Chain of Custody Record.

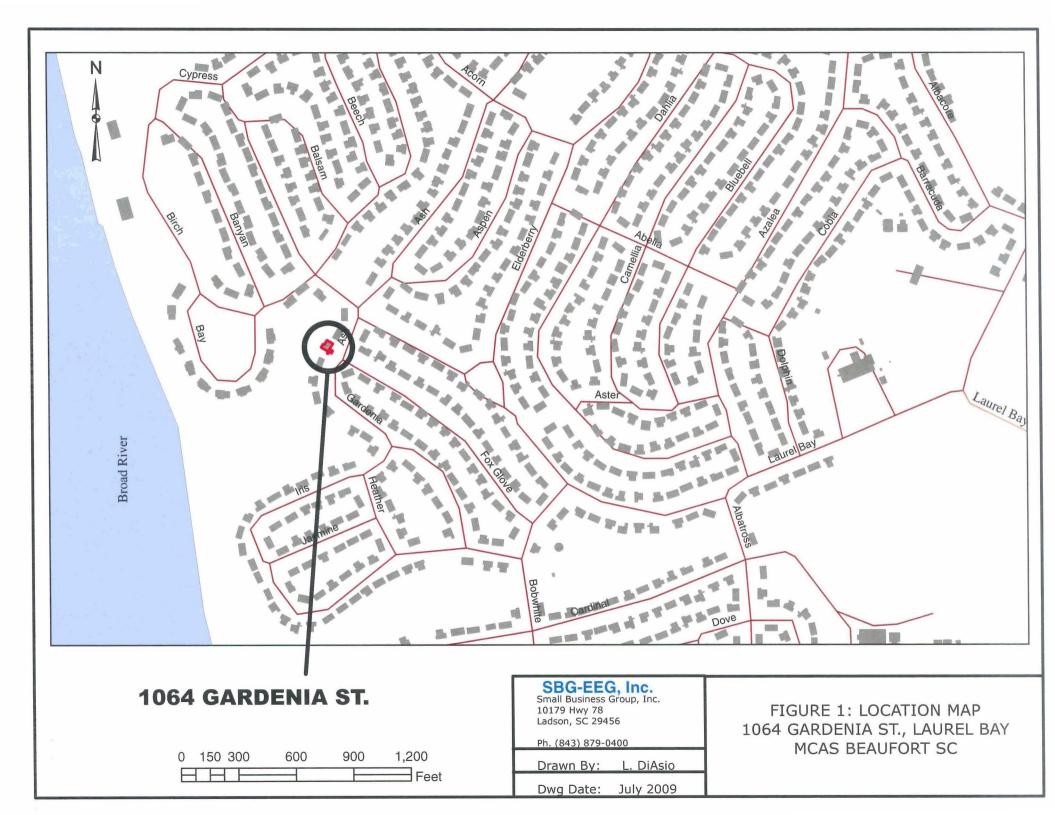
XII. RECEPTORS

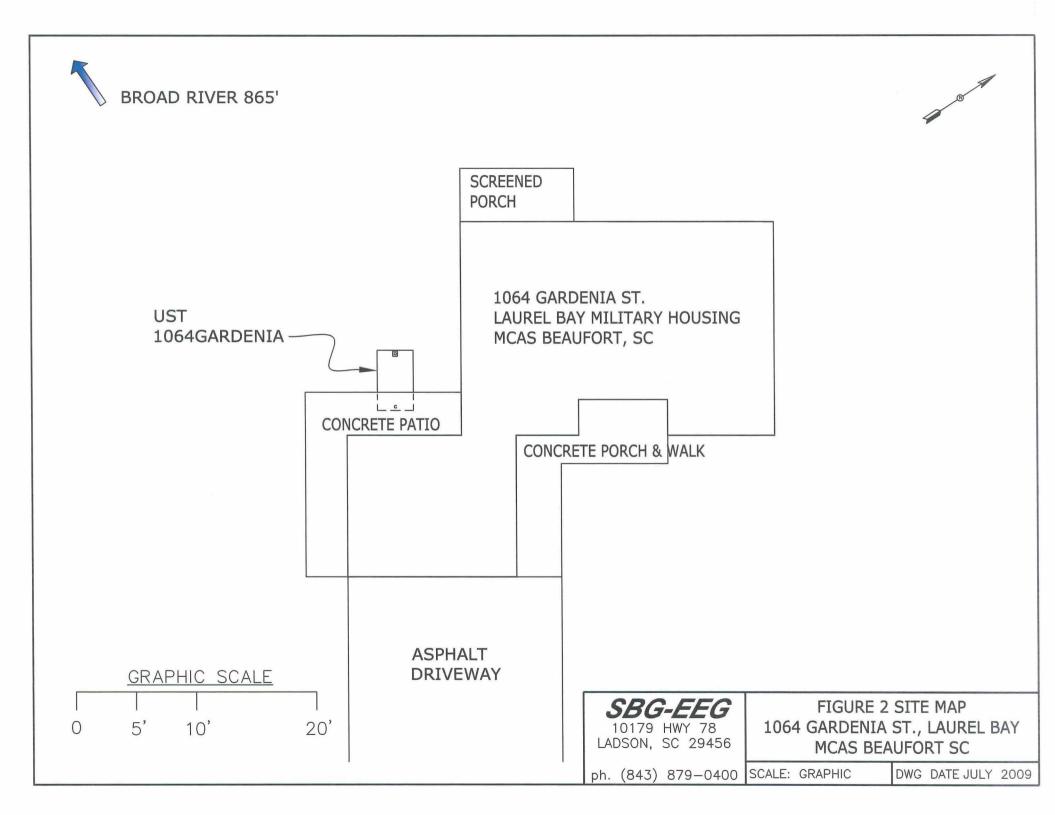
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	Х	
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate 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?		X
	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.	Х*	
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

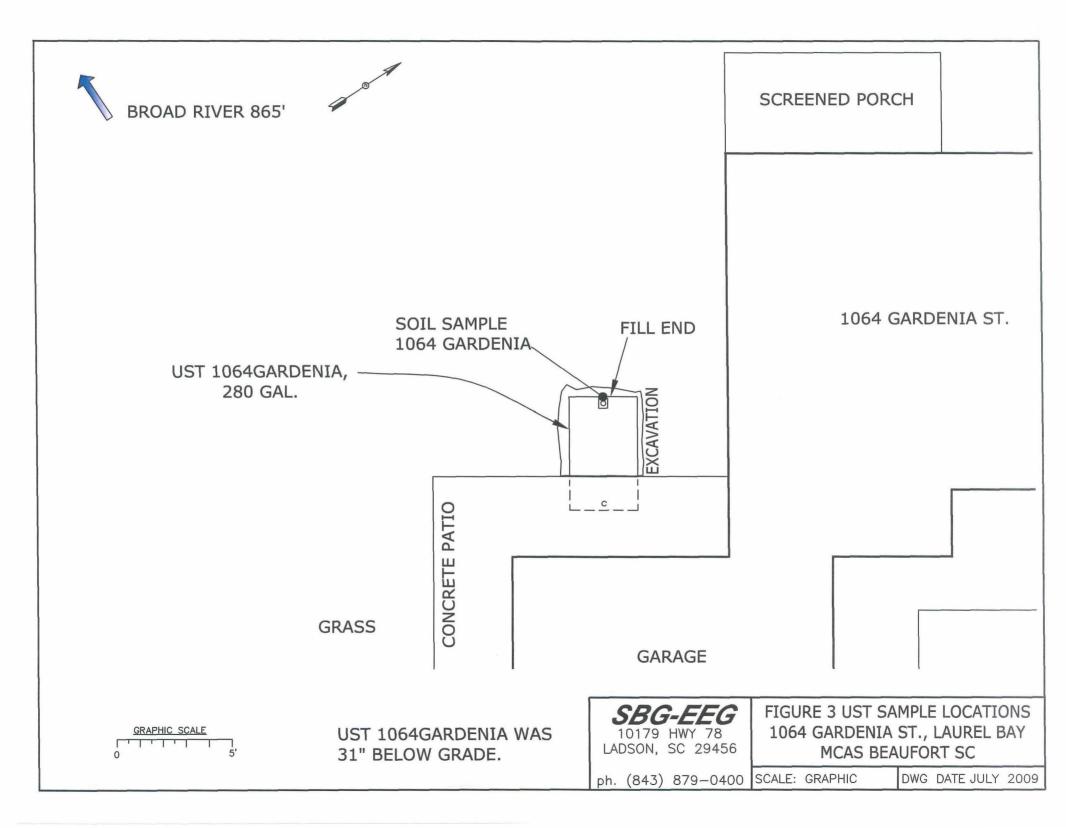
XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: UST 1064Gardenia site prior to excavation (tank located near brick wall and partially under patio).



Picture 2: UST 1064Gardenia during excavation and removal.

XIV. SUMMARY OF ANALYSIS RESULTS

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC UST	1064Gardenia
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	0.0128 mg/kg
Naphthalene	0.0717 mg/kg
Benzo (a) anthracene	ND ND
Benzo (b) fluoranthene	ND ND
Benzo (k) fluoranthene	ND
Chrysene	ND
Dibenz (a, h) anthracene	ND 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.

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
МТВЕ	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

(Attach Certified Analytical Results and Chain-of-Custody Here) (Please see Form #4)



June 26, 2009 1:41:44PM

Client: EEG - Small Business Group, Inc. (2449) Work Order: NSF1280

10179 Highway 78

Ladson, SC 29456

Project Name:

[none]

Rom Mc Flyee

P/O Nbr:

0829

Attn: Tom McElwee P/O Nbr: 0829
Date Received: 06/12/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1061 Gardenia	NSF1280-01	06/09/09 10:00
1062 Gardenia-1	NSF1280-02	06/09/09 15:00
1062 Gardenia-2	NSF1280-03	06/10/09 09:45
1064 Gardenia	NSF1280-04	06/10/09 11:40
1067 Gardenia	NSF1280-05	06/11/09 11:15

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.

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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.

Yem & A Hage

Report Approved By:

Ken A. Hayes

Senior Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456 Tom McElwee

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 06/12/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSF1280-01 (1061 Ga	- rdenia - Soil) S	ampled:	06/09/09 10:00					
General Chemistry Parameters	della son, s	шириса	00/05/05 10:00					
% Dry Solids	64.4		%	0.500	1	06/24/09 09:09	SW-846	906370
•			70	0.500	•	00/2 1/05 05:05	311 010	700570
Selected Volatile Organic Compounds	•	8260B						
Benzene	ND		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	906214
Ethylbenzene	0.0160		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	906214
Naphthalene	0.760		mg/kg dry	0.322	50	06/18/09 20:36	SW846 8260B	906310
Toluene	ND		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Xylenes, total	ND		mg/kg dry	0.00562	1	06/16/09 16:53	SW846 8260B	9062143
Surr: 1,2-Dichloroethane-d4 (67-138%)	87 %					06/16/09 16:53	SW846 8260B	906214
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					06/18/09 20:36	SW846 8260B	906310
Surr: Dibromofluoromethane (75-125%)	97 %					06/16/09 16:53	SW846 8260B	906214
Surr: Dibromofluoromethane (75-125%)	93 %					06/18/09 20:36	SW846 8260B	906310
Surr: Toluene-d8 (76-129%)	136 %	ZX				06/16/09 16:53	SW846 8260B	906214
Surr: Toluene-d8 (76-129%)	97 %	av				06/18/09 20:36	SW846 8260B	906310
Surr: 4-Bromofluorobenzene (67-147%)	203 %	ZX				06/16/09 16:53	SW846 8260B	906214
Surr: 4-Bromofluorobenzene (67-147%)	103 %					06/18/09 20:36	SW846 8260B	906310
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND		mg/kg dry	0.103	I	06/17/09 21:33	SW846 8270D	9062159
Acenaphthylene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (a) anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (a) pyrene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (b) fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (k) fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Chrysene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Fluorene	0.218		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
ndeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Naphthalene	0.549		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Phenanthrene	0.286		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Pyrene	0.280 ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
•	1.54			0.103	1	06/17/09 21:33	SW846 8270D	9062159
-Methylnaphthalene			mg/kg dry					
2-Methylnaphthalene	2.05		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	87 %					06/17/09 21:33	SW846 8270D	9062159
Surr: 2-Fluorobiphenyl (14-120%)	76 % 71 %					06/17/09 21:33	SW846 8270D	9062159



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

Tom McElwee

Client

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 06/12/09 08:00

ANALYTICAL REPORT

					Dilution	Analysis		
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSF1280-02 (1062 Ga	rdenia-1 - Soil)	Sampled	: 06/09/09 15:00					
General Chemistry Parameters								
% Dry Solids	72.2		%	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	0.171		mg/kg dry	0.00197	1	06/16/09 17:24	SW846 8260B	9062143
Ethylbenzene	3.58		mg/kg dry	0.106	50	06/18/09 21:07	SW846 8260B	9063105
Naphthalene	23.0		mg/kg dry	5.29	1000	06/18/09 21:37	SW846 8260B	9063105
Toluene	0.00591		mg/kg dry	0.00197	1	06/16/09 17:24	SW846 8260B	9062143
Xylenes, total	2.34		mg/kg dry	0.265	50	06/18/09 21:07	SW846 8260B	9063105
Surr: 1,2-Dichloroethane-d4 (67-138%)	115 %		5 6 7			06/16/09 17:24	SW846 8260B	9062143
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					06/18/09 21:07	SW846 8260B	9063105
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					06/18/09 21:37	SW846 8260B	9063105
Surr: Dibromofluoromethane (75-125%)	103 %					06/16/09 17:24	SW846 8260B	9062143
Surr: Dibromofluoromethane (75-125%)	90 %					06/18/09 21:07	SW846 8260B	9063105
Surr: Dibromofluoromethane (75-125%)	95 %					06/18/09 21:37	SW846 8260B	9063105
Surr: Toluene-d8 (76-129%)	3420 %	ZX				06/16/09 17:24	SW846 8260B	9062143
Surr: Toluene-d8 (76-129%)	110 %					06/18/09 21:07	SW846 8260B	9063105
Surr: Toluene-d8 (76-129%)	102 %					06/18/09 21:37	SW846 8260B	9063105
Surr: 4-Bromofluorobenzene (67-147%)	1140 %	ZX				06/16/09 17:24	SW846 8260B	9062143
Surr: 4-Bromofluorobenzene (67-147%)	104 %					06/18/09 21:07	SW846 8260B	9063105
Surr: 4-Bromofluorobenzene (67-147%)	103 %					06/18/09 21:37	SW846 8260B	9063105
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Acenaphthylene	1.72		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Anthracene	3.41		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Benzo (a) anthracene	4.42		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Benzo (a) pyrene	1.68		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Benzo (b) fluoranthene	2.42		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Benzo (k) fluoranthene	1.38		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Chrysene	4.38			0.912	10			
Dibenz (a,h) anthracene			mg/kg dry			06/17/09 23:03	SW846 8270D	9062159
* * /	ND		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Fluoranthene	12.4		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Fluorene	6.77		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Naphthalene	21.6		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Phenanthrene	20.3		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Pyrene	11.3		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
1-Methylnaphthalene	48.4		mg/kg dry	4.56	50	06/19/09 17:03	SW846 8270D	9062159
2-Methylnaphthalene	75.8		mg/kg dry	4.56	50	06/19/09 17:03	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	101 %					06/17/09 23:03	SW846 8270D	9062159
Surr: 2-Fluorobiphenyl (14-120%)	98 %					06/17/09 23:03	SW846 8270D	9062159
Surr: Nitrobenzene-d5 (17-120%)	38 %					06/17/09 23:03	SW846 8270D	9062159



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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received:

06/12/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSF1280-03 (1062 Ga	rdenia-2 - Soi	l) Sampled:	06/10/09 09:45					
General Chemistry Parameters								
% Dry Solids	76.6		%	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds	by EPA Method	d 8260B						
Benzene	ND		mg/kg dry	0.00193	1	06/17/09 19:29	SW846 8260B	9063090
Ethylbenzene	ND		mg/kg dry	0.00193	1	06/17/09 19:29	SW846 8260B	9063090
Naphthalene	ND	RL1	mg/kg dry	0.262	50	06/23/09 21:17	SW846 8260B	9063966
Toluene	ND		mg/kg dry	0.00193	1	06/17/09 19:29	SW846 8260B	9063090
Xylenes, total	ND		mg/kg dry	0.00481	1	06/17/09 19:29	SW846 8260B	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	89 %					06/17/09 19:29	SW846 8260B	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					06/23/09 21:17	SW846 8260B	9063966
Surr: Dibromofluoromethane (75-125%)	99 %					06/17/09 19:29	SW846 8260B	9063090
Surr: Dibromofluoromethane (75-125%)	102 %					06/23/09 21:17	SW846 8260B	9063966
Surr: Toluene-d8 (76-129%)	133 %	ZX				06/17/09 19:29	SW846 8260B	9063090
Surr: Toluene-d8 (76-129%)	92 %					06/23/09 21:17	SW846 8260B	9063966
Surr: 4-Bromofluorobenzene (67-147%)	177 %	ZX				06/17/09 19:29	SW846 8260B	9063090
Surr: 4-Bromofluorobenzene (67-147%)	106 %					06/23/09 21:17	SW846 8260B	9063966
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	0.104		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Acenaphthylene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Anthracene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Benzo (a) anthracene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Benzo (a) pyrene	0.257		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Benzo (b) fluoranthene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Benzo (k) fluoranthene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Chrysene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Fluoranthene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Fluorene	0.125		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Naphthalene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Phenanthrene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Pyrene	ND		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
1-Methylnaphthalene	0.0863		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
2-Methylnaphthalene	0.110		mg/kg dry	0.0863	1	06/17/09 21:55	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	89 %		3·01	5000	•	06/17/09 21:55	SW846 8270D	9062159
Surr: 2-Fluorobiphenyl (14-120%)	80 %					06/17/09 21:55	SW846 8270D	9062159
Surr: Nitrobenzene-d5 (17-120%)	74 %					06/17/09 21:55	SW846 8270D	9062159



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 06/12/09 08:00

ANALYTICAL REPORT

		A	NALYTICAL RE	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSF1280-04 (1064 Ga	rdenia - Soil) S	ampled: 0	6/10/09 11:40					
General Chemistry Parameters								
% Dry Solids	81.2		0/0	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00188	1	06/17/09 20:00	SW846 8260B	9063090
Ethylbenzene	ND		mg/kg dry	0.00188	1	06/17/09 20:00	SW846 8260B	9063090
Naphthalene	0.0717		mg/kg dry	0.00471	1	06/17/09 20:00	SW846 8260B	9063090
Toluene	ND		mg/kg dry	0.00188	1	06/17/09 20:00	SW846 8260B	9063090
Xylenes, total	0.0128		mg/kg dry	0.00471	1	06/17/09 20:00	SW846 8260B	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	88 %		00,			06/17/09 20:00	SW846 8260B	9063090
Surr: Dibromofluoromethane (75-125%)	97 %					06/17/09 20:00	SW846 8260B	9063090
Surr: Toluene-d8 (76-129%)	100 %					06/17/09 20:00	SW846 8260B	9063090
Surr: 4-Bromofluorobenzene (67-147%)	117 %					06/17/09 20:00	SW846 8260B	9063090
Polyaromatic Hydrocarbons by EPA 8	270D							
Acenaphthene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Acenaphthylene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Anthracene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Benzo (a) anthracene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Benzo (a) pyrene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Benzo (b) fluoranthene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Benzo (k) fluoranthene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Chrysene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Fluoranthene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Fluorene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Naphthalene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Phenanthrene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Pyrene	ND		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
1-Methylnaphthalene	0.0820		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
2-Methylnaphthalene	0.0910		mg/kg dry	0.0820	1	06/17/09 22:18	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	92 %					06/17/09 22:18	SW846 8270D	9062159
Surr: 2-Fluorobiphenyl (14-120%)	85 %					06/17/09 22:18	SW846 8270D	9062159
Surr: Nitrobenzene-d5 (17-120%)	79 %					06/17/09 22:18	SW846 8270D	9062159



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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 06/12/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSF1280-05 (1067 Ga	rdenia - Soil) S	ampled: 06	/11/09 11:15					
General Chemistry Parameters								
% Dry Solids	81.1		%	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00197	1	06/17/09 20:31	SW846 8260B	9063090
Ethylbenzene	ND		mg/kg dry	0.00197	1	06/17/09 20:31	SW846 8260B	9063090
Naphthalene	0.0273		mg/kg dry	0.00492	1	06/17/09 20:31	SW846 8260B	9063090
Toluene	ND		mg/kg dry	0.00197	1	06/17/09 20:31	SW846 8260B	9063090
Xylenes, total	ND		mg/kg dry	0.00492	1	06/17/09 20:31	SW846 8260B	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	90 %					06/17/09 20:31	SW846 8260B	9063090
Surr: Dibromofluoromethane (75-125%)	95 %					06/17/09 20:31	SW846 8260B	9063090
Surr: Toluene-d8 (76-129%)	103 %					06/17/09 20:31	SW846 8260B	9063090
Surr: 4-Bromofluorobenzene (67-147%)	176 %	ZX				06/17/09 20:31	SW846 8260B	9063090
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Acenaphthylene	ND		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Anthracene	1.07	:	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (a) anthracene	2.66	1	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (a) pyrene	0.977	1	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (b) fluoranthene	1.47	1	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND	1	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (k) fluoranthene	0.837	1	mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Chrysene	2.61	1	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Dibenz (a,h) anthracene	0.173	1	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Fluoranthene	10.0	1	ng/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
Fluorene	0.577	1	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	0.292	1	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Naphthalene	ND	1	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Phenanthrene	5.38	1	ng/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
Pyrene	8.54	İ	ng/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
1-Methylnaphthalene	0.198	I	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
2-Methylnaphthalene	0.233	r	ng/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	103 %		•			06/17/09 22:40	SW846 8270D	9062159
Surr: 2-Fluorobiphenyl (14-120%)	82 %					06/17/09 22:40	SW846 8270D	9062159
Surr: Nitrobenzene-d5 (17-120%)	78 %					06/17/09 22:40	SW846 8270D	9062159



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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 06/12/09 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by E	EPA 8270D						
SW846 8270D	9062159	NSF1280-01	30.32	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-02	30.52	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-02RE1	30.52	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-02RE2	30.52	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-03	30.39	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-04	30.18	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-05	30.05	1.00	06/15/09 10:23	TEM	EPA 3550B
SW846 8270D	9062159	NSF1280-05RE1	30.05	1.00	06/15/09 10:23	TEM	EPA 3550B
Selected Volatile Organic Compo	ounds by EPA Method	8260B					
SW846 8260B	9062143	NSF1280-01	6.91	5.00	06/09/09 10:00	JRL	EPA 5035
SW846 8260B	9063105	NSF1280-01RE1	6.03	5.00	06/09/09 10:00	JRL	EPA 5035
SW846 8260B	9062143	NSF1280-02	7.04	5.00	06/09/09 15:00	JRL	EPA 5035
SW846 8260B	9063105	NSF1280-02RE1	6.54	5.00	06/09/09 15:00	JRL	EPA 5035
SW846 8260B	9063105	NSF1280-02RE2	6.54	5.00	06/09/09 15:00	JRL	EPA 5035
SW846 8260B	9062143	NSF1280-03	6.67	5.00	06/10/09 09:45	JRL	EPA 5035
SW846 8260B	9063090	NSF1280-03RE1	6.78	5.00	06/10/09 09:45	JRL	EPA 5035
SW846 8260B	9063966	NSF1280-03RE2	6.22	5.00	06/10/09 09:45	JRL	EPA 5035
SW846 8260B	9062143	NSF1280-04	6.58	5.00	06/10/09 11:40	JRL	EPA 5035
SW846 8260B	9063090	NSF1280-04RE1	6.54	5.00	06/10/09 11:40	JRL	EPA 5035
SW846 8260B	9062143	NSF1280-05	7.18	5.00	06/11/09 11:15	JRL	EPA 5035
SW846 8260B	9062143	NSF1280-05RE1	6.28	5.00	06/11/09 11:15	JRL	EPA 5035
SW846 8260B	9063090	NSF1280-05RE2	6.27	5.00	06/11/09 11:15	JRL	EPA 5035



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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number: [no

[none]

Received: 06/12/09 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 FPA Method	8260R					
9062143-BLK1	ands by Exit intelled	02002					
Benzene	< 0.000670		mg/kg wet	9062143	9062143-BLK1	06/16/09 15:01	
Ethylbenzene	< 0.000670		mg/kg wet	9062143	9062143-BLK1	06/16/09 15:01	
Naphthalene	< 0.00170		mg/kg wet	9062143	9062143-BLK1	06/16/09 15:01	
Toluene	< 0.000400		mg/kg wet	9062143	9062143-BLK1	06/16/09 15:01	
Xylenes, total	< 0.00130		mg/kg wet	9062143	9062143-BLK1	06/16/09 15:01	
Surrogate: 1,2-Dichloroethane-d4	90%			9062143	9062143-BLK1	06/16/09 15:01	
Surrogate: Dibromofluoromethane	97%			9062143	9062143-BLK1	06/16/09 15:01	
Surrogate: Toluene-d8	99%			9062143	9062143-BLK1	06/16/09 15:01	
Surrogate: 4-Bromofluorobenzene	127%			9062143	9062143-BLK1	06/16/09 15:01	
9063090-BLK1							
Benzene	< 0.000670		mg/kg wet	9063090	9063090-BLK1	06/17/09 14:36	
Ethylbenzene	< 0.000670		mg/kg wet	9063090	9063090-BLK1	06/17/09 14:36	
Naphthalene	< 0.00170		mg/kg wet	9063090	9063090-BLK1	06/17/09 14:36	
Toluene	< 0.000400		mg/kg wet	9063090	9063090-BLK1	06/17/09 14:36	
Xylenes, total	< 0.00130		mg/kg wet	9063090	9063090-BLK1	06/17/09 14:36	
Surrogate: 1,2-Dichloroethane-d4	93%			9063090	9063090-BLK1	06/17/09 14:36	
Surrogate: Dibromofluoromethane	97%			9063090	9063090-BLK1	06/17/09 14:36	
Surrogate: Toluene-d8	98%			9063090	9063090-BLK1	06/17/09 14:36	
Surrogate: 4-Bromofluorobenzene	101%			9063090	9063090-BLK1	06/17/09 14:36	
9063105-BLK1							
Benzene	< 0.000670		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06	
Ethylbenzene	< 0.000670		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06	
Naphthalene	< 0.00170		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06	
Toluene	< 0.000400		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06	
Xylenes, total	< 0.00130		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06	
Surrogate: 1,2-Dichloroethane-d4	98%			9063105	9063105-BLK1	06/18/09 20:06	
Surrogate: Dibromofluoromethane	96%			9063105	9063105-BLK1	06/18/09 20:06	
Surrogate: Toluene-d8	99%			9063105	9063105-BLK1	06/18/09 20:06	
Surrogate: 4-Bromofluorobenzene	99%			9063105	9063105-BLK1	06/18/09 20:06	
Polyaromatic Hydrocarbons by E	PA 8270D						
9062159-BLK1							
Acenaphthene	< 0.0320		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Acenaphthylene	< 0.0310		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Anthracene	< 0.0330		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Benzo (a) anthracene	< 0.0380		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Benzo (a) pyrene	< 0.0300		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Benzo (b) fluoranthene	< 0.0300		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Benzo (g,h,i) perylene	< 0.0300		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Benzo (k) fluoranthene	< 0.0300		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

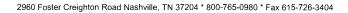
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Received:

06/12/09 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 8270D						
9062159-BLK1	,						
Chrysene	< 0.0400		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Dibenz (a,h) anthracene	< 0.0310		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Fluoranthene	< 0.0340		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Fluorene	< 0.0360		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Naphthalene	< 0.0410		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Phenanthrene	< 0.0340		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Pyrene	< 0.0410		mg/kg wet	9062159	9062159-BLK1	06/17/09 00:26	
Surrogate: Terphenyl-d14	106%			9062159	9062159-BLK1	06/17/09 00:26	
Surrogate: 2-Fluorobiphenyl	93%			9062159	9062159-BLK1	06/17/09 00:26	
Surrogate: Nitrobenzene-d5	90%			9062159	9062159-BLK1	06/17/09 00:26	





10179 Highway 78

Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Project Number: [none]

Received:

06/12/09 08:00

Laurel Bay Housing Project

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters 9063707-DUP1										
% Dry Solids	82.3	83.2		%	1	20	9063707	NSF1209-01		06/24/09 09:09



10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

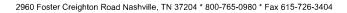
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Received:

06/12/09 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						
9062143-BS1								
Benzene	50.0	50.8		ug/kg	102%	78 - 126	9062143	06/16/09 12:57
Ethylbenzene	50.0	54.3		ug/kg	109%	79 - 130	9062143	06/16/09 12:57
Naphthalene	50.0	62.0		ug/kg	124%	72 - 150	9062143	06/16/09 12:57
Toluene	50.0	51.6		ug/kg	103%	76 - 126	9062143	06/16/09 12:57
Xylenes, total	150	164		ug/kg	109%	80 - 130	9062143	06/16/09 12:57
Surrogate: 1,2-Dichloroethane-d4	50.0	45.0			90%	67 - 138	9062143	06/16/09 12:57
Surrogate: Dibromofluoromethane	50.0	49.8			100%	75 - 125	9062143	06/16/09 12:57
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9062143	06/16/09 12:57
Surrogate: 4-Bromofluorobenzene	50.0	61.4			123%	67 - 147	9062143	06/16/09 12:57
9063090-BS1								
Benzene	50.0	53.1		ug/kg	106%	78 - 126	9063090	06/17/09 13:02
Ethylbenzene	50.0	55.0		ug/kg	110%	79 - 130	9063090	06/17/09 13:02
Naphthalene	50.0	62.5		ug/kg	125%	72 - 150	9063090	06/17/09 13:02
Toluene	50.0	53.2		ug/kg	106%	76 - 126	9063090	06/17/09 13:02
Xylenes, total	150	165		ug/kg	110%	80 - 130	9063090	06/17/09 13:02
Surrogate: 1,2-Dichloroethane-d4	50.0	44.9			90%	67 - 138	9063090	06/17/09 13:02
Surrogate: Dibromofluoromethane	50.0	48.2			96%	75 - 125	9063090	06/17/09 13:02
Surrogate: Toluene-d8	50.0	48.6			97%	76 - 129	9063090	06/17/09 13:02
Surrogate: 4-Bromofluorobenzene	50.0	62.0			124%	67 - 147	9063090	06/17/09 13:02
9063105-BS1								
Benzene	50.0	51.8		ug/kg	104%	78 - 126	9063105	06/18/09 18:03
Ethylbenzene	50.0	48.9		ug/kg	98%	79 - 130	9063105	06/18/09 18:03
Naphthalene	50.0	50.7		ug/kg	101%	72 - 150	9063105	06/18/09 18:03
Toluene	50.0	49.5		ug/kg	99%	76 - 126	9063105	06/18/09 18:03
Xylenes, total	150	146		ug/kg	98%	80 - 130	9063105	06/18/09 18:03
Surrogate: 1,2-Dichloroethane-d4	50.0	48.7			97%	67 - 138	9063105	06/18/09 18:03
Surrogate: Dibromofluoromethane	50.0	48.6			97%	75 - 125	9063105	06/18/09 18:03
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9063105	06/18/09 18:03
Surrogate: 4-Bromofluorobenzene	50.0	50.1			100%	67 - 147	9063105	06/18/09 18:03
Polyaromatic Hydrocarbons by EPA	A 8270D							
9062159-BS1								
Acenaphthene	1.67	1.43		mg/kg wet	86%	49 - 120	9062159	06/17/09 00:47
Acenaphthylene	1.67	1.44		mg/kg wet	86%	52 - 120	9062159	06/17/09 00:47
Anthracene	1.67	1.65		mg/kg wet	99%	58 - 120	9062159	06/17/09 00:47
Benzo (a) anthracene	1.67	1.47		mg/kg wet	88%	57 - 120	9062159	06/17/09 00:47
Benzo (a) pyrene	1.67	1.53		mg/kg wet	92%	55 - 120	9062159	06/17/09 00:47
Benzo (b) fluoranthene	1.67	1.65		mg/kg wet	99%	51 - 123	9062159	06/17/09 00:47
Benzo (g,h,i) perylene	1.67	1.34		mg/kg wet	80%	49 - 121	9062159	06/17/09 00:47
Benzo (k) fluoranthene	1.67	1.46		mg/kg wet	87%	42 - 129	9062159	06/17/09 00:47





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 06/12/09 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 EP								
9062159-BS1								
Chrysene	1.67	1.54		mg/kg wet	92%	55 - 120	9062159	06/17/09 00:47
Dibenz (a,h) anthracene	1.67	1.38		mg/kg wet	83%	50 - 123	9062159	06/17/09 00:47
Fluoranthene	1.67	1.66		mg/kg wet	100%	58 - 120	9062159	06/17/09 00:47
Fluorene	1.67	1.47		mg/kg wet	88%	54 - 120	9062159	06/17/09 00:47
Indeno (1,2,3-cd) pyrene	1.67	1.41		mg/kg wet	85%	50 - 122	9062159	06/17/09 00:47
Naphthalene	1.67	1.22		mg/kg wet	73%	28 - 107	9062159	06/17/09 00:47
Phenanthrene	1.67	1.45		mg/kg wet	87%	56 - 120	9062159	06/17/09 00:47
Pyrene	1.67	1.44		mg/kg wet	86%	56 - 120	9062159	06/17/09 00:47
Surrogate: Terphenyl-d14	1.67	1.45			87%	18 - 120	9062159	06/17/09 00:47
Surrogate: 2-Fluorobiphenyl	1.67	1.40			84%	14 - 120	9062159	06/17/09 00:47
Surrogate: Nitrobenzene-d5	1.67	1.25			75%	17 - 120	9062159	06/17/09 00:47



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF1280

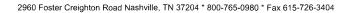
Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 06/12/09 08:00

PROJECT QUALITY CONTROL DATA LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compo	ounds by EPA	Method 826	50B									
9062143-BSD1												
Benzene		50.4		ug/kg	50.0	101%	78 - 126	0.6	50	9062143		06/16/09 13:28
Ethylbenzene		53.5		ug/kg	50.0	107%	79 - 130	1	50	9062143		06/16/09 13:28
Naphthalene		65.8		ug/kg	50.0	132%	72 - 150	6	50	9062143		06/16/09 13:28
Toluene		51.5		ug/kg	50.0	103%	76 - 126	0.2	50	9062143		06/16/09 13:28
Xylenes, total		161		ug/kg	150	107%	80 - 130	2	50	9062143		06/16/09 13:28
Surrogate: 1,2-Dichloroethane-d4		45.5		ug/kg	50.0	91%	67 - 138			9062143		06/16/09 13:28
Surrogate: Dibromofluoromethane		48.7		ug/kg	50.0	97%	75 - 125			9062143		06/16/09 13:28
Surrogate: Toluene-d8		49.7		ug/kg	50.0	99%	76 - 129			9062143		06/16/09 13:28
Surrogate: 4-Bromofluorobenzene		63.1		ug/kg	50.0	126%	67 - 147			9062143		06/16/09 13:28
9063090-BSD1												
Benzene		52.6		ug/kg	50.0	105%	78 - 126	0.9	50	9063090		06/17/09 13:33
Ethylbenzene		54.2		ug/kg	50.0	108%	79 - 130	1	50	9063090		06/17/09 13:33
Naphthalene		63.6		ug/kg	50.0	127%	72 - 150	2	50	9063090		06/17/09 13:33
Toluene		53.1		ug/kg	50.0	106%	76 - 126	0.2	50	9063090		06/17/09 13:33
Xylenes, total		164		ug/kg	150	109%	80 - 130	0.7	50	9063090		06/17/09 13:33
Surrogate: 1,2-Dichloroethane-d4		44.9		ug/kg	50.0	90%	67 - 138			9063090		06/17/09 13:33
Surrogate: Dibromofluoromethane		47.9		ug/kg	50.0	96%	75 - 125			9063090		06/17/09 13:33
Surrogate: Toluene-d8		48.4		ug/kg	50.0	97%	76 - 129			9063090		06/17/09 13:33
Surrogate: 4-Bromofluorobenzene		62.3		ug/kg	50.0	125%	67 - 147			9063090		06/17/09 13:33
9063105-BSD1												
Benzene		51.9		ug/kg	50.0	104%	78 - 126	1.0	50	9063105		06/18/09 18:34
Ethylbenzene		47.5		ug/kg	50.0	95%	79 - 130	3	50	9063105		06/18/09 18:34
Naphthalene		49.6		ug/kg	50.0	99%	72 - 150	2	50	9063105		06/18/09 18:34
Toluene		49.0		ug/kg	50.0	98%	76 - 126	1	50	9063105		06/18/09 18:34
Xylenes, total		143		ug/kg	150	95%	80 - 130	2	50	9063105		06/18/09 18:34
Surrogate: 1,2-Dichloroethane-d4		49.7		ug/kg	50.0	99%	67 - 138			9063105		06/18/09 18:34
Surrogate: Dibromofluoromethane		49.9		ug/kg	50.0	100%	75 - 125			9063105		06/18/09 18:34
Surrogate: Toluene-d8		50.0		ug/kg	50.0	100%	76 - 129			9063105		06/18/09 18:34
Surrogate: 4-Bromofluorobenzene		50.4		ug/kg	50.0	101%	67 - 147			9063105		06/18/09 18:34
Polyaromatic Hydrocarbons by E	PA 8270D											
0062159-BSD1												
Acenaphthene		1.60		mg/kg wet	1.67	96%	49 - 120	11	40	9062159		06/17/09 01:09
Acenaphthylene		1.60		mg/kg wet	1.67	96%	52 - 120	11	30	9062159		06/17/09 01:09
Anthracene		1.81		mg/kg wet	1.67	109%	58 - 120	9	50	9062159		06/17/09 01:09
Benzo (a) anthracene		1.70		mg/kg wet	1.67	102%	57 - 120	14	30	9062159		06/17/09 01:09
Benzo (a) pyrene		1.76		mg/kg wet	1.67	105%	55 - 120	14	33	9062159		06/17/09 01:09
Benzo (b) fluoranthene		1.69		mg/kg wet	1.67	101%	51 - 123	2	42	9062159		06/17/09 01:09
Benzo (g,h,i) perylene		1.53		mg/kg wet	1.67	92%	49 - 121	13	32	9062159		06/17/09 01:09





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Received:

Laurel Bay Housing Project

Project Number:

[none] 06/12/09 08:00

PROJECT QUALITY CONTROL DATA LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA	8270D											
9062159-BSD1												
Benzo (k) fluoranthene		1.82		mg/kg wet	1.67	110%	42 - 129	22	39	9062159		06/17/09 01:09
Chrysene		1.80		mg/kg wet	1.67	108%	55 - 120	16	34	9062159		06/17/09 01:09
Dibenz (a,h) anthracene		1.60		mg/kg wet	1.67	96%	50 - 123	14	31	9062159		06/17/09 01:09
Fluoranthene		1.83		mg/kg wet	1.67	110%	58 - 120	9	35	9062159		06/17/09 01:09
Fluorene		1.64		mg/kg wet	1.67	99%	54 - 120	11	37	9062159		06/17/09 01:09
Indeno (1,2,3-cd) pyrene		1.63		mg/kg wet	1.67	98%	50 - 122	14	32	9062159		06/17/09 01:09
Naphthalene		1.29		mg/kg wet	1.67	78%	28 - 107	6	34	9062159		06/17/09 01:09
Phenanthrene		1.63		mg/kg wet	1.67	98%	56 - 120	11	32	9062159		06/17/09 01:09
Pyrene		1.61		mg/kg wet	1.67	96%	56 - 120	11	40	9062159		06/17/09 01:09
Surrogate: Terphenyl-d14		1.55		mg/kg wet	1.67	93%	18 - 120			9062159		06/17/09 01:09
Surrogate: 2-Fluorobiphenyl		1.47		mg/kg wet	1.67	88%	14 - 120			9062159		06/17/09 01:09
Surrogate: Nitrobenzene-d5		1.23		mg/kg wet	1.67	74%	17 - 120			9062159		06/17/09 01:09



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Received:

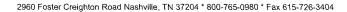
Laurel Bay Housing Project

Project Number:

[none] 06/12/09 08:00

PROJECT QUALITY CONTROL DATA

	PROJECT QUALITY CONTROL DATA Matrix Spike													
Analyte	Orig. Val.	MS Val	Q L	Jnits	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time				
Selected Volatile Organic Compo	unds by EPA Me	thod 8260B												
9062143-MS1														
Benzene	ND	2.32	mg/	kg dry	2.45	94%	42 - 141	9062143	NSF1280-05RE	06/16/09 20:00				
Ethylbenzene	ND	2.60	mg/	kg dry	2.45	106%	21 - 165	9062143	NSF1280-05RE	06/16/09 20:00				
Naphthalene	0.283	2.74	mg/	kg dry	2.45	100%	10 - 160	9062143	NSF1280-05RE	06/16/09 20:00				
Toluene	ND	2.41	mg/	kg dry	2.45	98%	45 - 145	9062143	NSF1280-05RE	06/16/09 20:00				
Xylenes, total	ND	7.90	mg/	kg dry	7.36	107%	31 - 159	9062143	NSF1280-05RE	06/16/09 20:00				
Surrogate: 1,2-Dichloroethane-d4		44.6	u	g/kg	50.0	89%	67 - 138	9062143	NSF1280-05RE	06/16/09 20:00				
Surrogate: Dibromofluoromethane		48.6	uį	g/kg	50.0	97%	75 - 125	9062143	NSF1280-05RE	06/16/09 20:00				
Surrogate: Toluene-d8		48.4	uį	g/kg	50.0	97%	76 - 129	9062143	NSF1280-05RE	06/16/09 20:00				
Surrogate: 4-Bromofluorobenzene		51.9	uį	g/kg	50.0	104%	67 - 147	9062143	NSF1280-05RE 1	06/16/09 20:00				
9063105-MS1														
Benzene	ND	1.82	mg/l	kg wet	2.20	83%	42 - 141	9063105	NSF1550-04RE 1	06/19/09 00:40				
Ethylbenzene	ND	1.88	mg/l	kg wet	2.20	86%	21 - 165	9063105	NSF1550-04RE	06/19/09 00:40				
Naphthalene	ND	1.62	mg/l	kg wet	2.20	74%	10 - 160	9063105	NSF1550-04RE	06/19/09 00:40				
Toluene	ND	1.82	mg/l	kg wet	2.20	83%	45 - 145	9063105	NSF1550-04RE	06/19/09 00:40				
Xylenes, total	ND	5.61	mg/l	kg wet	6.59	85%	31 - 159	9063105	NSF1550-04RE	06/19/09 00:40				
Surrogate: 1,2-Dichloroethane-d4		49.6	ug	g/kg	50.0	99%	67 - 138	9063105	NSF1550-04RE	06/19/09 00:40				
Surrogate: Dibromofluoromethane		47.9	ug	g/kg	50.0	96%	75 - 125	9063105	NSF1550-04RE	06/19/09 00:40				
Surrogate: Toluene-d8		49.0	ug	g/kg	50.0	98%	76 - 129	9063105	NSF1550-04RE	06/19/09 00:40				
Surrogate: 4-Bromofluorobenzene		51.7	ug	g/kg	50.0	103%	67 - 147	9063105	NSF1550-04RE	06/19/09 00:40				
Polyaromatic Hydrocarbons by El	PA 8270D													
9062159-MS1														
Acenaphthene	ND	1.58	mg/l	kg dry	2.01	79%	42 - 120	9062159	NSF1280-05	06/17/09 01:30				
Acenaphthylene	ND	1.36	mg/k	cg dry	2.01	68%	32 - 120	9062159	NSF1280-05	06/17/09 01:30				
Anthracene	1.07	2.29	mg/k	kg dry	2.01	61%	10 - 200	9062159	NSF1280-05	06/17/09 01:30				
Benzo (a) anthracene	2.66	3.73	mg/k	kg dry	2.01	53%	41 - 120	9062159	NSF1280-05	06/17/09 01:30				
Benzo (a) pyrene	0.977	2.41	mg/k	g dry	2.01	71%	33 - 121	9062159	NSF1280-05	06/17/09 01:30				
Benzo (b) fluoranthene	1.47	3.12	mg/k	g dry	2.01	82%	26 - 137	9062159	NSF1280-05	06/17/09 01:30				





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

06/12/09 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

	Hattia Spike - Cont.													
Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time				
Polyaromatic Hydrocarbons by	EPA 8270D													
9062159-MS1														
Benzo (g,h,i) perylene	0.0550	1.49		mg/kg dry	2.01	71%	21 - 124	9062159	NSF1280-05	06/17/09 01:30				
Benzo (k) fluoranthene	0.837	2.81		mg/kg dry	2.01	98%	14 - 140	9062159	NSF1280-05	06/17/09 01:30				
Chrysene	2.61	3.71		mg/kg dry	2.01	55%	28 - 123	9062159	NSF1280-05	06/17/09 01:30				
Dibenz (a,h) anthracene	0.173	1.41		mg/kg dry	2.01	61%	25 - 127	9062159	NSF1280-05	06/17/09 01:30				
Fluoranthene	7.74	7.36	M1	mg/kg dry	2.01	-19%	38 - 120	9062159	NSF1280-05	06/17/09 01:30				
Fluorene	0.577	2.00		mg/kg dry	2.01	71%	41 - 120	9062159	NSF1280-05	06/17/09 01:30				
Indeno (1,2,3-cd) pyrene	0.292	1.57		mg/kg dry	2.01	63%	25 - 123	9062159	NSF1280-05	06/17/09 01:30				
Naphthalene	ND	1.37		mg/kg dry	2.01	68%	25 - 120	9062159	NSF1280-05	06/17/09 01:30				
Phenanthrene	4.63	5.06	Ml	mg/kg dry	2.01	21%	37 - 120	9062159	NSF1280-05	06/17/09 01:30				
Pyrene	6.90	6.24	Ml	mg/kg dry	2.01	-33%	29 - 125	9062159	NSF1280-05	06/17/09 01:30				
Surrogate: Terphenyl-d14		1.48		mg/kg dry	2.01	74%	18 - 120	9062159	NSF1280-05	06/17/09 01:30				
Surrogate: 2-Fluorobiphenyl		1.24		mg/kg dry	2.01	62%	14 - 120	9062159	NSF1280-05	06/17/09 01:30				
Surrogate: Nitrobenzene-d5		1.23		mg/kg dry	2.01	61%	17 - 120	9062159	NSF1280-05	06/17/09 01:30				



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF1280

Project Name: Laurel Bay Housing Project

Project Number: [none]
Received: 06/12/09 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

				мани ор	ikt Du	Р						
Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Comp	ounds by EPA	Method 826	0B									
9062143-MSD1												
Benzene	ND	2.27		mg/kg dry	2.45	93%	42 - 141	2	50	9062143	NSF1280-05RE	06/16/09 20:31
Ethylbenzene	ND	2.54		mg/kg dry	2.45	104%	21 - 165	2	50	9062143	NSF1280-05RE	06/16/09 20:31
Naphthalene	0.283	2.72		mg/kg dry	2.45	99%	10 - 160	0.8	50	9062143	NSF1280-05RE	06/16/09 20:31
Toluene	ND	2.33		mg/kg dry	2.45	95%	45 - 145	4	50	9062143	1 NSF1280-05RE	06/16/09 20:31
Xylenes, total	ND	7.69		mg/kg dry	7.36	104%	31 - 159	3	50	9062143	NSF1280-05RE	06/16/09 20:31
Surrogate: 1,2-Dichloroethane-d4		44.1		ug/kg	50.0	88%	67 - 138			9062143	NSF1280-05RE	06/16/09 20:31
Surrogate: Dibromofluoromethane		48.2		ug/kg	50.0	96%	75 - 125			9062143	NSF1280-05RE	06/16/09 20:31
Surrogate: Toluene-d8		48.6		ug/kg	50.0	97%	76 - 129			9062143	NSF1280-05RE	06/16/09 20:31
Surrogate: 4-Bromofluorobenzene		50.3		ug/kg	50.0	101%	67 - 147			9062143	1 NSF1280-05RE 1	06/16/09 20:31
9063105-MSD1												
Benzene	ND	1.85		mg/kg wet	2,20	84%	42 - 141	2	50	9063105	NSF1550-04RE	06/19/09 01:10
Ethylbenzene	ND	1.85		mg/kg wet	2.20	84%	21 - 165	1	50	9063105	NSF1550-04RE	06/19/09 01:10
Naphthalene	ND	1.67		mg/kg wet	2.20	76%	10 - 160	3	50	9063105	NSF1550-04RE	06/19/09 01:10
Toluene	ND	1.77		mg/kg wet	2.20	81%	45 - 145	2	50	9063105	NSF1550-04RE	06/19/09 01:10
Xylenes, total	ND	5.54		mg/kg wet	6.59	84%	31 - 159	1	50	9063105	NSF1550-04RE	06/19/09 01:10
Surrogate: 1,2-Dichloroethane-d4		49.3		ug/kg	50.0	99%	67 - 138			9063105	NSF1550-04RE	06/19/09 01:10
Surrogate: Dibromofluoromethane		47.4		ug/kg	50.0	95%	75 - 125			9063105	NSF1550-04RE	06/19/09 01:10
Surrogate: Toluene-d8		48.2		ug/kg	50.0	96%	76 - 129			9063105	NSF1550-04RE	06/19/09 01:10
Surrogate: 4-Bromofluorobenzene		52.9		ug/kg	50.0	106%	67 - 147			9063105	NSF1550-04RE 1	06/19/09 01:10
Polyaromatic Hydrocarbons by I	EPA 8270D											
9062159-MSD1		1.07		ο .	201	0001	10 100	2.2	40	0060150	Norteco	0.(11.7100 01.72
Acenaphthelen	ND ND	1.97		mg/kg dry	2.01	98%	42 - 120	22	40	9062159	NSF1280-05	06/17/09 01:52
Anthropene	ND	1.78		mg/kg dry	2.01	88%	32 - 120	27	30	9062159	NSF1280-05	06/17/09 01:52
Anthracene Benzo (a) anthracene	1.07 2.66	2.66 3.61		mg/kg dry	2.01	79% 47%	10 - 200 41 - 120	15	50	9062159	NSF1280-05 NSF1280-05	06/17/09 01:52
Benzo (a) anthracene Benzo (a) pyrene	2.66 0.977	2.65		mg/kg dry	2.01		33 - 121	3	30	9062159	NSF1280-05 NSF1280-05	06/17/09 01:52
· · • •				mg/kg dry	2.01	83%		10	33	9062159		06/17/09 01:52 06/17/09 01:52
Benzo (b) fluoranthene	1.47 0.0550	2.81		mg/kg dry	2.01	66%	26 - 137 21 - 124	11 25	42	9062159	NSF1280-05 NSF1280-05	
Benzo (g,h,i) perylene Benzo (k) fluoranthene	0.0550	1.91 2.89		mg/kg dry mg/kg dry	2.01	92% 102%	21 - 124 14 - 140	25 3	32 39	9062159 9062159	NSF1280-05 NSF1280-05	06/17/09 01:52 06/17/09 01:52
Denze (K) Interartment	0.057	2.07		mg/kg di y	2.01	10270	17 - 14V	J	39	7002133	1151 1200-03	00/17/07 01.32





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSF

NSF1280

Project Name:

Laurel Bay Housing Project

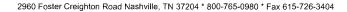
Project Number: [none]

Received:

06/12/09 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 9062159-MSD1	8270D											
Chrysene	2.61	3.53		mg/kg dry	2.01	46%	28 - 123	5	34	9062159	NSF1280-05	06/17/09 01:52
Dibenz (a,h) anthracene	0.173	1.90		mg/kg dry	2.01	86%	25 - 127	30	31	9062159	NSF1280-05	06/17/09 01:52
Fluoranthene	7.74	6.97	Ml	mg/kg dry	2.01	-39%	38 - 120	6	35	9062159	NSF1280-05	06/17/09 01:52
Fluorene	0.577	2.26		mg/kg dry	2.01	84%	41 - 120	12	37	9062159	NSF1280-05	06/17/09 01:52
Indeno (1,2,3-cd) pyrene	0.292	2.02		mg/kg dry	2.01	86%	25 - 123	25	32	9062159	NSF1280-05	06/17/09 01:52
Naphthalene	ND	1.59		mg/kg dry	2.01	79%	25 - 120	15	42	9062159	NSF1280-05	06/17/09 01:52
Phenanthrene	4.63	4.52	Ml	mg/kg dry	2.01	-5%	37 - 120	11	32	9062159	NSF1280-05	06/17/09 01:52
Pyrene	6.90	5.64	MI	mg/kg dry	2.01	-63%	29 - 125	10	40	9062159	NSF1280-05	06/17/09 01:52
Surrogate: Terphenyl-d14		1.90		mg/kg dry	2.01	95%	18 - 120			9062159	NSF1280-05	06/17/09 01:52
Surrogate: 2-Fluorobiphenyl		1.59		mg/kg dry	2.01	79%	14 - 120			9062159	NSF1280-05	06/17/09 01:52
Surrogate: Nitrobenzene-d5		1.57		mg/kg dry	2.01	78%	17 - 120			9062159	NSF1280-05	06/17/09 01:52





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

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number: [none]

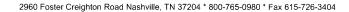
Received:

06/12/09 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

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





Client EEG - Small Business Group, Inc. (2449) Work Order: NSF1280

10179 Highway 78 Project Name: Laurel Bay Housing Project

Ladson, SC 29456 Project Number: [none]

Attn Tom McElwee Received: 06/12/09 08:00

DATA QUALIFIERS AND DEFINITIONS

M1 The MS and/or MSD were above 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

NSF1280

06/26/09 23:59

Testameri LE LEADER IN ENVIRONMENTAL	LEBTING	Nashville I 2960 Foste Nashville,	r Creigl	hton Toll Free: 800-765-0980			To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?			al or																	
Client Name/Account #: _																				•	Complia	ance Mo	onitorir	ıg?	Yes		_ No_
	10179 Highway																				Enforc	cement	Action	?	Yes	5	_ No_
City/State/Zip:																Site	State:										
Project Manager:		mail: mcelwi	e@eegi	nc.net			·	1 -		3-	7/3						PO#:		<u> </u>	<u> २६</u>							
Telephone Number:	7					Fax N	lo.: 🗸	4.	5-	0	7	<u>~ C</u>	48	1		TA Qu	ote#:		T								
Sampler Name: (Print)	0/11	MA	<u>υ</u>	·												Proje	ect ID:	Laure	Bay H	lousing	Projec	it					
Sampler Signature:	CID															Pro	ect#:										
		, 						reserv	ative		श		Mat	rix	7					A	nalyze	For:					1
Sample ID/Description 106/C-ARAZAIA 1062G-ARAZAIA-1 1062G-ARAZAIA-1 1064GARAZAIA 1064GARAZAIA	6/9/09 6/9/09 6/09 6/09 6/09 6/09 6/09	1000 1500 1995 1115	5	que of X X X X	Composite Freid Filtered	eoj	NON N HWO, (Red Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	ひんりひひ None (Black Label)	Other I. Specify M.C.H. 4	Groundwater	Drinking Water		X X X X	(W い い い い い い い い い	P V D D PAH - 8270C										RUSH TAT (Pre-Schedule
		 		-		+		╁┼	+	+	\dashv	+	H	+	+=	=			+-	+-	+	 	 	ļ.,,	 		
Special Instructions: Relinquished by: Relinquished by:	College Date	29	Time	0	eceived	by:	thod of	<u> </u>	ment	:		6	/// Da	of Contract of the contract of	EDE	X Time	9	Labo	Temp		ents: e Upon of Head	,		Z -	d _e (Y

ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

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

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

TANK ID & LOCATION

UST 1064Gardenia, 1064 Gardenia St., Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TYPE OF TANK	SIZE (GAL)
Steel	280

CLEANING/DISPOSAL METHOD

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

DISPOSAL CERTIFICATION

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

(Name) (Date

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB1064TW01WG20151120

Laboratory ID: QK20097-009

Date Sampled: 11/20/2015 0935

Matrix: Aqueous

Date Received: 11/20/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 1 5030B 8260B 12/01/2015 2052 ALL 91002

	CAS	Analytical							
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units R	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	6.3	В	5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	1.0	J	5.0	0.57	0.32	ug/L	1

Run 1 Q % Recovery	Acceptance Limits
97	75-120
105	70-120
104	85-120
102	85-115
	Q % Recovery 97 105 104

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

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

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

N = Recovery is out of criteria

S = MS/MSD failure

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1064TW01WG20151120

Matrix: Aqueous

Laboratory ID: QK20097-009

Date Sampled: 11/20/2015 0935 Date Received: 11/20/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date Batcl	h
1	3520C	8270D (SIM)	1	12/04/2015 0107 RBH	11/24/2015 1615 9044	3

	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)	0.040	U	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)	0.040	U	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		66	15-139
Fluoranthene-d10		69	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 N = Recovery is out of criteria L = LCS/LCSD failure S = MS/MSD 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%

Shealy Environmental Services, Inc.

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

Appendix D Regulatory Correspondence





Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

July 1, 2015

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

RE: 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 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) Bryan Beck (via email)



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:**

Subject: IGWA Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 2	432 Elderberry
257 Beech Tank 1 257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 2	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 2
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3
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Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal



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

June 8, 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-November and December 2015

Laurel Bay Military Housing Area Multiple Properties

Dated April 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 attached addresses on May 2, 2016. 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 15 stated addresses. For the remaining 80 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 <u>petruslb@dhec.sc.gov</u> or 803-898-0294.

Sincerely,

Laurel Petrus

NETS

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-November and December 2015

Specific Property Recommendations

Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Monitoring Well Investigation recommendation (15 addresses)		
130 Banyan Drive	473 Dogwood Drive	
256 Beech Street	747 Blue Bell Lane	
285 Birch Drive	749 Blue Bell Lane	
292 Birch Drive	775 Althea Street	
330 Ash Street	1034 Foxglove Street	
331 Ash Street	1104 Iris Lane	
335 Ash Street	1124 Iris Lane	
342 Ash Street		

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	-
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

Attachment to: Petrus to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015
Specific Property Recommendations
Dated June 8, 2016, Page 2