SUMMARY REPORT
72 GARDENIA DRIVE (FORMERLY 1062 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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9324 Virginia Avenue Norfolk, Virginia 23511-3095

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 72 Gardenia Drive (Formerly 1062 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 72 Gardenia Drive (Formerly 1062 Gardenia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1062 Gardenia Drive* (MCAS Beaufort, 2008) and *SCDHEC UST Assessment Report – 1062 Gardenia Drive* (MCAS Beaufort, 2009). The UST Assessment Reports are 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

Three 280 gallon heating oil USTs were removed from 72 Gardenia Drive (Formerly 1062 Gardenia Drive). Tank 1 was removed on August 20, 2007 from the front landscaped area adjacent to the house. Tank 2 was removed on June 9, 2009 from the front landscaped area



adjacent to the concrete porch. Tank 3 was removed on June 10, 2009 from the front grassed area of the house. The former UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of each UST removal. According to the UST Assessment Reports (Appendix B), the depths to the bases of the USTs were 5'0" (Tank 1), 6'1" (Tank 2) and 4'5" (Tank 3) bgs and a single soil sample was collected from each at those depths. An additional soil sample was collected from the side of the excavation for Tank 1 at a depth of 4'0" bgs. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removal, soil samples were collected from the base of each excavation and the side of the excavation of Tank 1 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. Copies of each laboratory analytical data report are included in the UST Assessment Reports 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 Tank 1 and Tank 3 at 72 Gardenia Drive (Formerly 1062 Gardenia Drive) were less than the SCDHEC RBSLs, which indicated that the soil was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment. The soil results collected from Tank 2 at 72 Gardenia Drive (Formerly 1062 Gardenia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In letters dated May 15, 2014 and March 3, 2015, SCDHEC requested an IGWA for 72 Gardenia Drive (Formerly 1062 Gardenia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letters are provided in Appendix D.



### 2.3 Groundwater Sampling

On May 20, 2015, a temporary monitoring well was installed at 72 Gardenia Drive (Formerly 1062 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 (Tank 2). The former UST location is indicated in the figure of the *SCDHEC UST Assessment Report – 1062 Gardenia Drive* (MCAS Beaufort, 2009). The UST Assessment Report is provided in 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 72 Gardenia Drive (Formerly 1062 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 (Tank 2) at concentrations that present a potential risk to human health and the environment.

### 3.0 PROPERTY STATUS

Based on the analytical results for soil for Tank 1, SCDHEC made the determination that NFA was required for 72 Gardenia Drive (Formerly 1062 Gardenia Drive). This NFA determination was obtained in a letter dated August 13, 2008. Based on the analytical results for groundwater for Tank 2 and Tank 3, SCDHEC made the determination that NFA was required



for 72 Gardenia Drive (Formerly 1062 Gardenia Drive). This NFA determination was obtained in a letter dated February 22, 2016. SCDHEC's NFA letters are provided in Appendix D.

#### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2008. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 1062 Gardenia Drive, Laurel Bay Military Housing Area, August 2008.
- Marine Corps Air Station Beaufort, 2009. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 1062 Gardenia Drive, Laurel Bay Military Housing Area, October 2009.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report May and June 2015, Laurel Bay Military Housing Area, Multiple Properties, 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.



Summary Report 72 Gardenia Drive (Formerly 1062 Gardenia Drive) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

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 72 Gardenia Drive (Formerly 1062 Gardenia Drive)

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

		Results Samples Collected 08/20/07, 06/09/09, and 06/10/09					
Constituent	SCDHEC RBSLs (1)	1062 Gardenia Bottom 01 08/20/07	1062 Gardenia Side 02 08/20/07	1062 Gardenia - 1 06/09/09	1062 Gardenia - 2 06/10/09		
Volatile Organic Compounds Analyze	ed by EPA Method 8260B (mg/kg)						
Benzene	0.003	ND	ND	0.171	ND		
Ethylbenzene	1.15	0.00082	0.000504	3.580	ND		
Naphthalene	0.036	0.0124	0.003	23.000	ND		
Toluene	0.627	0.00184	0.000967	0.0059	ND		
Xylenes, Total	13.01	0.000482	0.000341	2.340	ND		
Semivolatile Organic Compounds An	alyzed by EPA Method 8270D (mg/kg	)					
Benzo(a)anthracene	0.66	ND	ND	4.42	ND		
Benzo(b)fluoranthene	0.66	ND	ND	2.42	ND		
Benzo(k)fluoranthene	0.66	ND	ND	1.380	ND		
Chrysene	0.66	ND	ND	4.38	ND		
Dibenz(a,h)anthracene	0.66	ND	ND	ND	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

<sup>(1)</sup> 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).

#### Table 2

# Laboratory Analytical Results - Groundwater 72 Gardenia Drive (Formerly 1062 Gardenia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific	Results Sample Collected 05/21/15
	GODINEO NEGES	Groundwater VISLs	BEALB1062TW02WG20150521 05/21/15
Volatile Organic Compounds Analyzed	d by EPA Method 8260B ( <b>µ</b> g	g/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Ana	llyzed by EPA Method 8270	D ( <b>µ</b> g/L)	
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

#### Notes:

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.

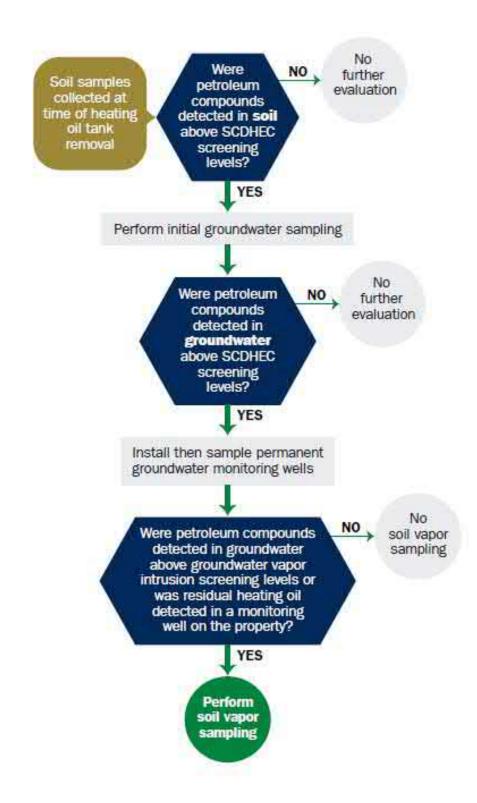
RBSL - Risk-Based Screening Level

<sup>(1)</sup> 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).

<sup>(2)</sup> 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<sup>-6</sup>, 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.

# Appendix A Multi-Media Selection Process for LBMH





**Appendix A - Multi-Media Selection Process for LBMH** 

# Appendix B UST Assessment Reports



# Attachment 1 South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank (UST) Assessment Report



Submit Completed Form To:
UST Program
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 896-6240

Owner Name (Corporation, Individual, Public Agency, Other)

Beaufort Military Complex Family Housing

Mailing Address

1510 Laurel Bay Blvd.

City State Zip Code
Beaufort SC 29906

Area Code Telephone Number Contact Person

843-379-3305

Luke Asterman

### III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on N/A at Permit ID # 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.
And
I do/do not (circle one) wish to participate in the Superb Program.
IV. CERTIFICATION (To be signed by the UST owner/operator.)
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
(Name)
Notary Public for the state of Please affix State seal if you are commissioned outside South Carolina

UST INFORMATION	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Gas, Kerosene)	#2 Fuel					
. 1k, 2k)	280 G					
······						
Material(ex. Steel, FRP)	Steel					-
Last Use			,			
Base of Tank	60"					
n Equipment Y/N	N					
tion Equipment Y/N	N					
sure Removed/Filled	Remova	,			<del>  </del>	
noved/Filled	8/20/07					<u> </u>
on or Pitting Y/N	8/20/07				· ·	
Y/N	<i>N</i>			•		·
sal for any USTs removed from t	he ground (att	ach disp	osal man	nifests)		
g: Scrap Steel	· ·	<del></del>			<u> </u>	<del></del>
sal for any liquid petroleum, sludg	ges, or wastew	aters rer	noved fr	om the U	JSTs (atta	nch
			<del></del>	**************************************		<del></del>
	Solidification & Si	Solidification & Subtitle D	Solidification & Subtitle D Landi	Solidification & Subtitle D Landfill	Solidification & Subtitle D Landfill	AGBUDIIC_Broadhurst_Landfill_

### VI. PIPING INFORMATION

1ank 1	Tank 2	Tank 3	Tank 4	Tank 5	Ta
Steel				1	-
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NIR	-		<u> </u>		L
-0-					<u> </u>
Suction					
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HEATING	<u> </u>	ANK			
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	N/k -0- suction Y N	Steel  N/A  -0-  Suction  Y  N	Steel  N/A  -0-  Amilia  Suction  Y  N	Steel  N/A  -0-  Andrew  Suction  Y  N	Steel  N/A  -0-  Almost  Suction-  Y  N

### VIII. SITE COND...iONS

	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.	<u> </u>	×	4
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.)		×	
C. Was water present in the UST excavation, soil borings, or trenches?			
If yes, how far below land surface (indicate location and depth)?		×	
D. Did contaminated soils remain stockpiled on site after closure?			
If yes, indicate the stockpile location on the site map.	İ		Í
Name of DHEC representative authorizing soil removal:			
·		X	H
E. Was a petroleum sheen or free product detected on any excavation or boring waters?			
If yes, indicate location and thickness.		x	

SCDHEC Lab Certification Number DW: 84009002

В

	В.					•		
	Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
		<u> </u>						
	1	BOTTOM	5 5	SAND	60"	8-20-07	M. Jones	ND
	2	BOTTOM S:DE	5	SAND	48"	8-20-07	M. Jones M. Jones	ND
	3	<u>.</u>					M. JOHO	700
	4				<del></del>			
	5							
	6							
	7					<del></del>		
	8				<u> </u>			
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\* = Depth Below the Surrounding Land Surface

### 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.

EPA Method 8260B : Volatile Organic Compounds
- Preservatives: 2 ea. Sodium Bisulfate; 1 ea. Methanol
EPA Method 8270 : Polyaromatic Hydrocarbons
_ No Preservative
One (1) sidewall and one (1) bottom sample were secured
from each UST excavation. Samples were stored and shipped
in an insulated cooler with wet Ice.

### XI. RECEPTORS

<b></b>		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		
	If yes, indicate type of receptor, distance, and direction on site map.		×
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		
	If yes, indicate type of well, distance, and direction on site map.	   	<i>i</i> /
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		
	If yes, indicate type of structure, distance, and direction on site map.		1
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?		
	If yes, indicate the type of utility, distance, and direction on the site map.		1
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?	:	1/
	If yes, indicate the area of contaminated soil on the site map.		

1062 TANK I BASE 60"

GARDENIA DRIVE



### TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 42" B-SOIL TEST BOTTOM SAMPLE @ 60"

CUSTOMER:

BEAUFORT MILITARY COMPLEX FAMILY HOUSING

1062 GARDENIA DRIVE

SCALE:

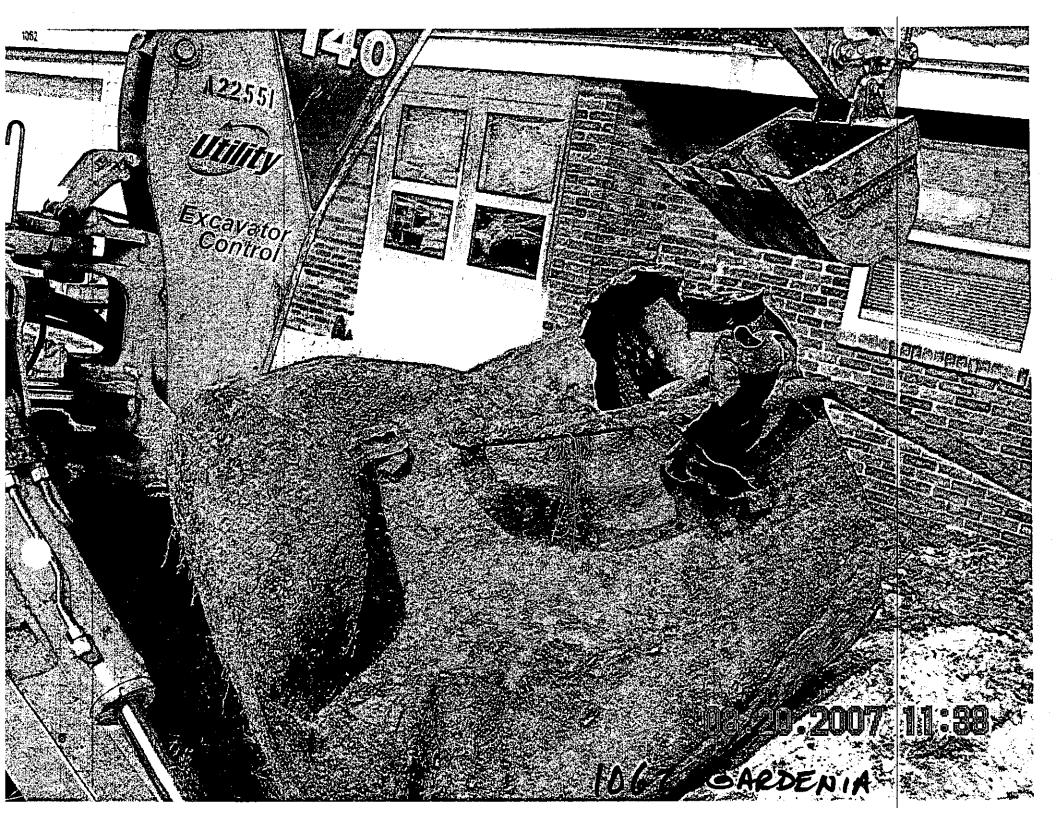
1/16'=1'-0"

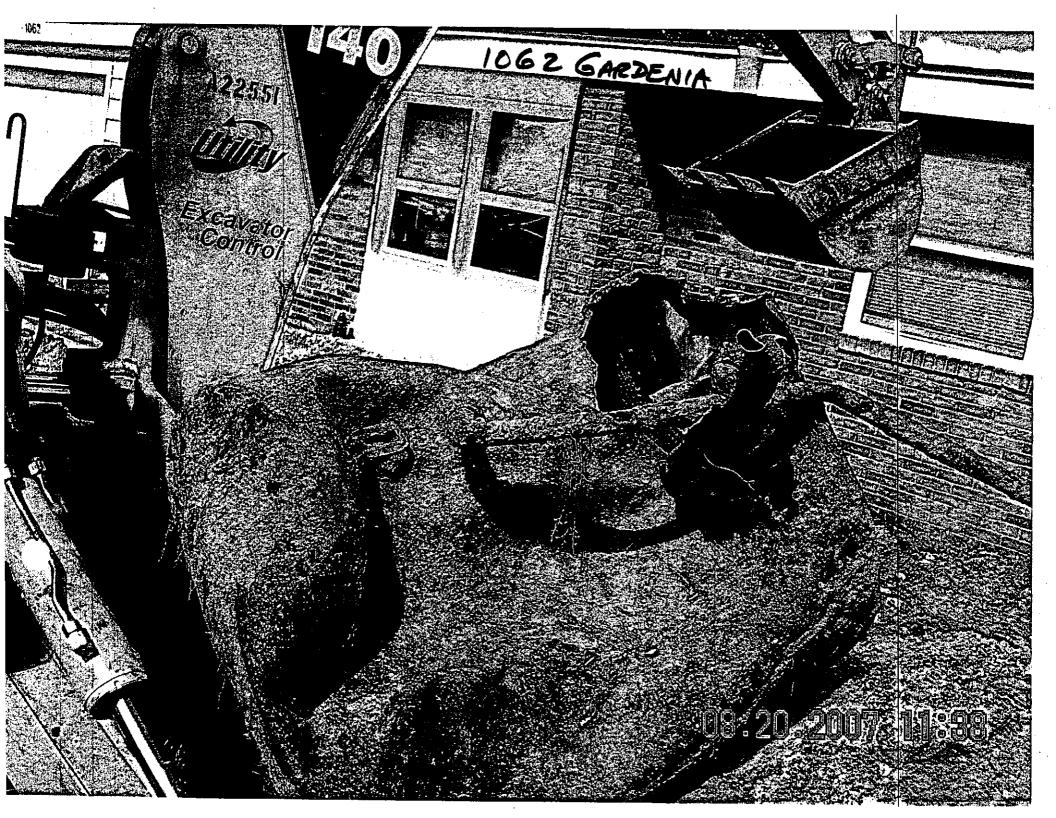
SUPPLIER:

EPG INC. DATE: 9/20/2007

EPG INC.

P.O. BOX 1096 MOUNT PLEASANT, SC 29465-1096





### 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.

present, indicate the measured	T ====	die neatest o	.01 1661.		
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		<del></del>	<u> </u>	
Naphthalene	25		<b> </b>		
Benzo(a)anthracene	10				
Benzo(b)flouranthene	10				
Benzo(k)flouranthene	10				
Chrysene	10	<u> </u>			:
Dibenz(a,h)anthracen e	10				
ED8	.05		···· turnium runse	and the second of the second o	<del>17-</del> 2 · ·
1,2-DCA	.05				
Lead	Site specific	·			

### **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.

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



Client: EPG, INC.

Attn:

PO BOX 1096

MT PLEASANT, SC 29465 JOHN MAHONEY

Work Order:

OQH0601

LAUREL BAY

Project: Project Number:

EP-2362

Sampled: 08/17/07-08/20/07

Received: 08/24/07

### LABORATORY REPORT

Sample ID: 1131 IRIS SIDE 02 - Lab Number: OQH0601-02 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
	Organic Compounds by EPA										_
71-43-2	Benzene	0.192	ľ	ug/kg dry	0.140	0.384	1	08/29/07 13:29	JWT	EPA 8260B	7H27020
100-41-4	Ethylbenzene	0.522		ug/kg dry	0.162	0.384	I	08/29/07 13:29	JWT	EPA 8260B	7H27020
91-20-3	Naphthalene	1.86		ug/kg dry	0.212	0.384	1	08/29/07 13:29	JWT	EPA 8260B	7H27020
.08-88-3	Toluene	0.645		ug/kg dry	0.331	0.384	1	08/29/07 13:29	JWT	EPA 8260B	7H27020
330-20-7	Xylenes, total	0.652	ug/kg dr		0.199	0.384	1	08/29/07 13:29	JWT	EPA 8260B	7H27020
urrogate: 1,	,2-Dichloroethane-d4 (73-137%)	121 %									
urrogate: 4	-Bromofluorobenzene (59-118%)	96 %									
urrogate: D	Dibromofluoromethane (55-145%)	108 %									
urrogate: T	oluene-d8 (80-117%)	98 %									
G <mark>eneral C</mark> Solids	Chemistry Parameters % Dry Solids	81.8	SPS	%	0.500	0.500	ī	08/24/07 16:05	AEB	SW-846	7085830
	atic Hydrocarbons by EPA 8		015		4.000	0.200	•	03/2-907 10:05	,	517-5-15	1002030
3-3 <b>2</b> -9	Acenaphthene	0.0426	U	mg/kg dry	0.0426	0.0792	1	08/31/07 03:02	RLB	SW846 8270	C7085614
08-96-8	Acenaphthylene	0.0520	ับ	mg/kg dry	0.0520	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
20-12-7	Anthracene	0.0473	บ	mg/kg dry	0.0473	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
6-55-3	Benzo (a) anthracene	0.0438	ប	mg/kg dry	0.0438	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
0-32-8	Benzo (a) pyrene	0.0473	บ	mg/kg dry	0.0473	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
05-99-2	Benzo (b) fluoranthene	0.0449	ប	mg/kg dry	0.0449	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
91-24-2	Benzo (g,h,i) perylene	0.0319	บ	mg/kg dry	0.0319	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
07-08-9	Benzo (k) fluoranthene	0.0544	υ	mg/kg dry	0.0544	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
18-01-9	Chrysene	0.0461	U	mg/kg dry	0.0461	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
3-70-3	Dibenz (a,h) anthracene	0.0307	บ	mg/kg dry	0.0307	0.0792	I	08/31/07 03:02	RLB	SW846 8270	C7085614
06-44-0	Fluoranthene	0.0497	บ	mg/kg dry	0.0497	0.0792	1	08/31/07 03:02	RLB	SW846 8270	C7085614
5-73-7	Fluorene	0.0509	U	mg/kg dry	0.0509	0.0792	1	08/31/07 03:02	RLB	SW846 8270	C7085614
93-39-5	Indeno (1,2,3-cd) pyrene	0.0402	U	mg/kg dry	0.0402	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
1-20-3	Naphthalene	0.0473	U	mg/kg dry	0.0473	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
5-01-8	Phenanthrene	0.170		mg/kg dry	0.0473	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
29-00-0	Pyrene	0.0556	U	mg/kg dry	0.0556	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
0-12-0	1-Methylnaphthalene	0.179		mg/kg dry	0.0426	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
-57-6	2-Methylnaphthalene	0.123		mg/kg dry	0.0426	0.0792	1	08/31/07 03:02	RLB	SW846 8270	
	erphenyl-d14 (49-123%)	54%				3.4.2		55.51.67.65.62		2.7010 0270	
	Fluorobiphenyl (30-93%)	54 %									

### LABORATORY REPORT

49%

Sample ID: 1062 GARDENIA-BOTTOM 01 - Lab Number: OQH0601-03 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q Units		MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
<del>řeneral</del> A	Chemistry Parameters —— % Solids	90.5		%.	0.100	0.100	1	08/24/07 16:05	RRP	EPA 160.3	7H24050
'olatile	Organic Compounds by EF	A Method 8260	В								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1-43-2	Benzene	0.138	U	ug/kg dry	0.138	0.376	1	08/29/07 13:46	JWT	EPA 8260B	7H27020
)0-41-4	Ethylbenzene	0.820		ug/kg dry	0.159	0.376	1	08/29/07 13:46	JWT	EPA 8260B	7H27020

urrogate: Nitrobenzene-d5 (34-87%)



Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465 Attn: JOHN MAHONEY

Work Order:

Project:

OQH0601

LAUREL BAY

Project Number: EP-2362

Sampled: 08/17/07-08/20/07

Received: 08/24/07

### LABORATORY REPORT

Sample ID: 1062 GARDENIA-BOTTOM 01 - Lab Number: OQH0601-03 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
	ganic Compounds by EPA		0B - Co								
	Naphthalene	12.4		ug/kg dry	0.208	0.376	1	08/29/07 13:46	JWT	EPA 8260B	7H27020
	Toluene	1.84		ug/kg dry	0.325	0.376	1	08/29/07 13:46	JWT	EPA 8260B	7H27020
	Xylenes, total	0.482		ug/kg dry	0.195	0.376	1	08/29/07 13:46	JWT	EPA 8260B	7H27020
_	-Dichloroethane-d4 (73-137%)	124 %									
_	romofluorobenzene (59-118%)	93 %									
•	romofluoromethane (55-145%)	102 %									
_	uene-d8 (80-117%)	97 %									
	emistry Parameters										
	% Dry Solids	90.5	SPS	%	0.500	0.500	l	08/24/07 16:05	AEB	SW-846	7085830
	tic Hydrocarbons by EPA 8										
	Acenaphthene	0.0392	Ū	mg/kg dry	0.0392	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Acenaphthylene	0.0479	U	mg/kg dry	0.0479	0.0729	1	08/31/07 03:28	RI.B	SW846 8270	-
	Anthracene	0.0435	υ	mg/kg dry	0.0435	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Benzo (a) anthracene	0.0403	บ	mg/kg dry	0.0403	0.0729	1 .	08/31/07 03:28	RLB	SW846 8270	
	Benzo (a) pyrene	0.0435	U	mg/kg dry	0.0435	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Benzo (b) fluoranthene	0.0413	U	mg/kg dry	0.0413	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Benzo (g,h,i) perylene	0.0294	U	mg/kg dry	0.0294	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	Benzo (k) fluoranthene	0.0500	U	mg/kg dry	0.0500	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Chrysene	0.0424	U	mg/kg dry	0.0424	0.0729	I	08/31/07 03:28	RLB	SW846 8270	C7085614
	Dibenz (a,h) anthracene	0.0283	U	mg/kg dry	0.0283	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	Fluoranthene	0.0457	U	mg/kg dry	0.0457	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Fluorene	0.0468	Ū	mg/kg dry	0.0468	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Indeno (1,2,3-cd) pyrene	0.0370	U	mg/kg dry	0.0370	0.0729	1	08/31/07 03:28	RLB	SW846 8270	
	Naphthalene	0.0435	U	mg/kg dry	0.0435	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	Phenanthrene	0.0435	U	mg/kg dry	0.0435	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	Рутепе	0.0511	U	mg/kg dry	0.0511	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	l-Methylnaphthalene	0.0392	Ū	mg/kg dry	0.0392	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	2-Methylnaphthalene	0.0392	U	mg/kg dry	0.0392	0.0729	1	08/31/07 03:28	RLB	SW846 8270	C7085614
	ohenyl-d14 (49-123%)	64 %									
-	uorobiphenyl (30-93%)	62 %									
ırrog <u>ate: N</u> itro	obenzene-d5 (34-87%)	56 %									

### LABORATORY REPORT

Sample ID: 1062 GARDENIA-SIDE 02 - Lab Number: OQH0601-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Feneral	Chemistry Parameters							·			
`A	% Solids	77.3		%.	0.100	0.100	1	08/24/07 16:05	RRP	EPA 160.3	7H24050
/olatile (	Organic Compounds by E	PA Method 8260	ЭB								
1-43-2	Benzene	0.149	U	ug/kg dry	0.149	0.406	1	08/29/07 14:03	JWT	EPA 8260B	7H27020
<b>30-41-4</b>	Ethylbenzene	0.504		ug/kg dry	0.172	0.406	ī	08/29/07 14:03	IWT	EPA 8260B	7H27020
1-20-3	Naphthalene	3.00		ug/kg dry	0.224	0.406	1	08/29/07 14:03	JWŢ	EPA 8260B	7H27020
38-88	Toluene	0.967		ug/kg dry	0.351	0.406	1	08/29/07 14:03	JWT	EPA 8260B	7H27020



Client: EPG, INC.

PQ BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

OQH0601

OQIIOOOI

Project: LA
Project Number: EH

LAUREL BAY EP-2362 Sampled: 08/17/07-08/20/07

Received: 08/24/07

### LABORATORY REPORT

### Sample ID: 1062 GARDENIA-SIDE 02 - Lab Number: OQH0601-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
	Organic Compounds by EPA	Method 826	0B - Co	nt.					_		
1330-20-7	Xylenes, total	0.341	I	ug/kg dry	0.211	0.406	1	08/29/07 14:03	JWT	EPA 8260B	7H27020
Surrogate: .	1,2-Dichloroethane-d4 (73-137%)	115 %									
Surrogate: 4	4-Bromofluorobenzene (59-118%)	91 %									
Surrogate: 1	Dibromofluoromethane (55-145%)	105 %		-							
Surrogate: 1	Toluene-d8 (80-117%)	96 %									
General (	Chemistry Parameters										
Solids	% Dry Solids	77.3	SPS	%	0.500	0.500	1	08/24/07 16:05	AEB	SW-846	7085830
Polyaron	natic Hydrocarbons by EPA 8	270C									
33-32-9	Acenaphthene	0.0456	U	mg/kg dry	0.0456	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
208-96-8	Acenaphthylene	0.0557	U	mg/kg dry	0.0557	0.0848	- 1	08/31/07 03:54	RLB	SW846 8270	C7085614
120-12-7	Anthracene	0.0506	Ŭ	mg/kg dry	0.0506	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
56-5 <b>5</b> -3	Benzo (a) anthracene	0.0468	U	mg/kg dry	0.0468	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
50-32-8	Benzo (a) pyrene	0.0506	ប	mg/kg dry	0.0506	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
205-99-2	Benzo (b) fluoranthene	0.0481	U	mg/kg dry	0.0481	0.0848	I	08/31/07 03:54	RLB	SW846 8270	C7085614
191-24-2	Benzo (g,h,i) perylene	0.0342	U	mg/kg dry	0.0342	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
.07- <b>08-9</b>	Benzo (k) fluoranthene	0.0582	Ū	mg/kg dry	0.0582	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
18-01-9	Chrysene	0.0494	บ	mg/kg dry	0.0494	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
i3-70-3	Dibenz (a,h) anthracene	0.0329	U	mg/kg dry	0.0329	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
:06-44-0	Fluoranthene ·	0.0532	ប	mg/kg dry	0.0532	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
6-73-7	Fluorene	0.0544	ซ	mg/kg dry	0.0544	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
93-39-5	Indeno (1,2,3-cd) pyrene	0.0430	U	mg/kg dry	0.0430	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
1-20-3	Naphthalene	0.0506	บ	mg/kg dry	0.0506	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
5-01-8	Phenanthrene	0.0553	I	mg/kg dry	0.0506	0.0848	1	08/31/07 03:54	RLB	SW846 8270	C7085614
29-00-0	Pyrene	0.0595	U	mg/kg dry	0.0595	0.0848	i	08/31/07 03:54	RLB	SW846 8270	C7085614
0-12-0	I-Methylnaphthalene	0.0456	U	mg/kg dry	0.0456	0.0848	1	08/31/07 03:54	RLB	SW846 8270	
1-57-6	2-Methylnaphthalene	0.0456	ប	mg/kg dry	0.0456	0.0848	1	08/31/07 03:54	RLB	SW846 8270	
urrogate: T	erphenyl-d14 (49-123%)	65 %		,		·			·		
urrogate: 2	-Fluorobiphenyl (30-93%)	64 %									
urrogate: N	litrobenzene-d5 (34-87%)	61 %									

### LABORATORY REPORT

### ------Sample ID: 1135 IRIS BOTTOM 01 - Lab Number: OQH0601-05 - Matrix: Solid/Soil

CAS#			Result Q		MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
	Chemistry Parameters		-	<del>.</del>				-			
A	% Solids	76.7		<b>%</b> .	0.100	0.100	ı	08/24/07 16:05	RRP	EPA 160.3	7H24050
<sup>7</sup> olatile (	Organic Compounds by EPA	Method 826	60B								
1-43-2	Benzene	19.2	RL2,U	ug/kg dry	19.2	52.3	100	08/29/07 15:12	JWT	EPA 8260B	7H27020
)0-41-4	Ethylbenzene	50.3	RL2,I	ug/kg dry	22.1	52.3	100	08/29/07 15:12	JWT	EPA 8260B	7H27020
1-20-3	Naphthalene	8480	RL2	ug/kg dry	28.9	52.3	100	08/29/07 15:12	TWL	EPA 8260B	7H27020
)8 <b>-</b> 88-3	Toluene	45.2	RL2,U	ug/kg dry	45.2	52.3	100	08/29/07 15:12	JWT	EPA 8260B	7H27020
330-20-7	Xylenes, total	34.5	RL2,I	ug/kg dry	27.2	52.3	100	08/29/07 15:12	JWT	EPA 8260B	7H27020
ırrogate: 1	,2-Dichloroethane-d4 (73-137%)	91 %									

Project Manager

# Test/merica ANALYTICAL TESTING CORPORATION

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring

ANALYTICAL TESTING COR	PORATION																	COLLE	100110011		שייי			<del> </del>
Client Name	EPG		— —						Cli	ent :	<b>#</b> :				_									1
. Address:															_	Projec	t Name:	<u> </u>	AUR	<u> </u>	$\mathbb{B}$	ĤΥ		
City/State/Zip Code:	:														_	Pi	roject#:	E	2-2	362	<u></u>			
Project Manager:	Toh	MA	hor	7 <u>2</u> (	1										- \$		ation ID:						State	
Telephone Number:					<i></i>		1	Fax:							_	Re	port To:	$\overline{\Delta}$	oh.	<u> </u>	Ma	hr	nel	/
Sampler Name: (Print Name)	MAC	K	Jo	ne	S		-				<del></del>				-		oice To:		<del></del>				/	
Sampler Signature:			(J.5-												-	c	Quote #:					PO#	:	
,			<i>V</i>		Matrix	Pre	serv	ation &	# of	Con	alne	r 2			<del>2</del> —			ze For:						1
TAT Standard Rush (surcharges may apply)  Date Needed:  Fax Results: Y N  SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	SL - Sludge DW - Drinking Water GW - Groundwater S - Solt/Solid WW - Wastowater Specify Other	HNO <sub>3</sub>	HCI.	HOEN	Methand	Mone	Whee / Specific	ories (should)	BTE,	Pour # MAP Th-821	## 82 70									QC Deliverables None Level 2 (Betch QC) Level 3 Level 4 Other:
1131 12:5- BOTTOM-01	8-12-7		Ğ	, <u> </u>	Ø 0 S	广	1		۲,	1	т.	×		x	1	1				<b> </b>	<del>                                     </del>		3	TEIDATTO
1131-18is 5:DE-02	817.7		C			Ì		<del>                                     </del>	+;	2	_			٨		<del>                                     </del>	<u> </u>		-	<del> </del>	<del>                                     </del>	<del>                                     </del>	02	
1062 GARDENIA BORTOM- OL			G			T			1			<u>با</u> ک		×	1	1-						†	03	
	8-20-7		C			1			1	ı :	2 4	2 ×	۷	X					******		<u> </u>	1	<b>०</b> ५	
11351Ris-BITTOM-01	8.20-7	3:00	G			Γ				1	2	2 /	<b>〈</b>	٨								1	20	
1135 123-Side- 02	8-20-7	3:00	C			Γ			Ti		2	2 1	(	4		1					<u> </u>	<u> </u>	66	
1135 1725 -Batton. 01	8-20.7	3,15	C			П			1	7	1	L X		K									Or	
1135 18:3. SiDE-02	8.20.7	3:15	C						1	2	- 2		•	L				·					08	
																							Ī .	
						L		L.J.																
Special instructions:									•		_	1			-					nit Lab		MMENT		
handushorby. Mahare i		8-23 Date:	07	Time	510	Rec	dive		2/	w	<u>ا</u>	1	Ľ,	0	S Date:	30	Time:	10			lemp ils: Y		N,	/A
Relinquilladore	; ;	3,23 Date:	07	Time	+50	Rec	eive	d By:	0	W	W	L phe			Date:	24-07	न के. Time:	1,30	Bottle	s Sup	olied by	/ Test /	America	YN
Relinquished By:		Date:		Time	9:	Re	ceive	ed Brr:			- /				Date:		Time:		Metino	d of S	hipmer	nt: Fo (	14	to TAIL

## Did You Remember to Include the Following?

- -- Permit ID Number
- -- Sample Collection and Storage Methods
- -- Preservative used in the sample containers
- -- Scaled Site Map with <u>ALL</u> Requested Information
- -- Laboratory Chain-of-Custody Form
- Certified Analytical Results
- -- Completed and Notarized Insurance Statement
- A Copy of Your Environmental Insurance Policy (if applicable)
- -- Samples from all Dispenser Islands and Piping Runs
- -- Photographs (if available)

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



OCT 0 8 2009

SC DNEC - Buresu of Land & Waste Management Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

er Attn: NREA gency, Other)	O (Craig Ehde)	
Carolina	29904-5001	
e	Zip Code	·
28-7317 le Number	Craig Ehde Contact Person	
(	gency, Other)  Carolina e	Carolina 29904-5001 e Zip Code 28-7317 Craig Ehde

### 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
1062 Gardenia St., Laurel Bay Military Housing Area Street Address or State Road (as applicable)
Beaufort, Beaufort
City County

Attachment 2

### III. INSURANCE INFORMATION

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

	VI. UST INFORMATION	1062	1062
		Gardenia-1	Gardenia-2
	Data (a. Car Variana)	Heating oil	Heating oil
A.	Product(ex. Gas, Kerosene)		
B.	Capacity(ex. 1k, 2k)	280 gal	280 gal
	• • •		
C.	Age	Late 1950s	Late 1950s
_		Steel	Steel
D.	Construction Material(ex. Steel, FRP)	56661	50001
-		Mid 1980s	Mid 1980s
E.	Month/Year of Last Use		
F.	Depth (ft.) To Base of Tank	6'1"	4 ' 5 "
			Mo
G.	Spill Prevention Equipment Y/N	No	No
	Overfill Prevention Equipment Y/N	No	No
Н.			
		Removed	Removed
I.	Method of Closure Removed/Filled		
J <sub>.</sub>	Date Tanks Removed/Filled	6/9/09	6/10/09
K.	Visible Corrosion or Pitting Y/N	Yes	Yes
L.	Visible Holes Y/N	Yes	Yes
L.			
M.	Method of disposal for any USTs removed from th UST 1062Gardenia-1 was removed from	e ground (attach disposa	l manifests) eaned and recycled.
	UST 1062Gardenia-2 was removed fr	rom the ground, c	leaned and recycled.
N.	Method of disposal for any liquid petroleum, sludg	ges, or wastewaters remo	ved from the USTs (attach
	disposal manifests)		
	UST 1062Gardenia-1 contained conta		
	tank and disposed of by MCAS. UST 1062Gardenia-2 contained conta	minated water th	at was pumped from
	the tank and disposed of by MCAS.		
O.	If any corrosion, pitting, or holes were observed, d	escribe the location and	extent for each UST
~·	Corrosion, pitting and holes were		
	totalon, proting and noted were		

### VII. PIPING INFORMATION

	1062   Gardenia-1	1062   Gardenia-2					
	Steel	Steel					
Construction Material(ex. Steel, FRP)	& Copper	& Copper					
Distance from UST to Dispenser	N/A	N/A					
Number of Dispensers	N/A	N/A					
Type of System Pressure or Suction	Suction	Suction					
Was Piping Removed from the Ground? Y/N	Yes	*Yes					
Visible Corrosion or Pitting Y/N	Yes	Unknown					
Visible Holes Y/N	No	Unknown					
Age	Late 1950s	Late 1950s					
Corrosion and pitting were found steel vent pipe. The copper supp	ly & return pipi	ng was sound.					
VIII. BRIEF SITE DESCR							
The USTs at the residences are c		. <del>-</del>					
and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.							
Installed in the late 1930s and	Tabe abea III ene	mra 1500b.					

## 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?  Mild odor noted in end of UST 1062Gardenia-1 If yes, indicate location on site map and describe the odor (strong, mild, etc.)	X xcavati	.on	
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 96012001

B. \_\_\_\_\_

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
	Excav at fill end		Sandy	6'1"	6/9/09 1500 hrs	P. Shaw	
	Excav at fill end		Sandy	4'5"	1500 hrs 6/10/09 0945 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20				1: 1	10.0		

<sup>\* =</sup> 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.

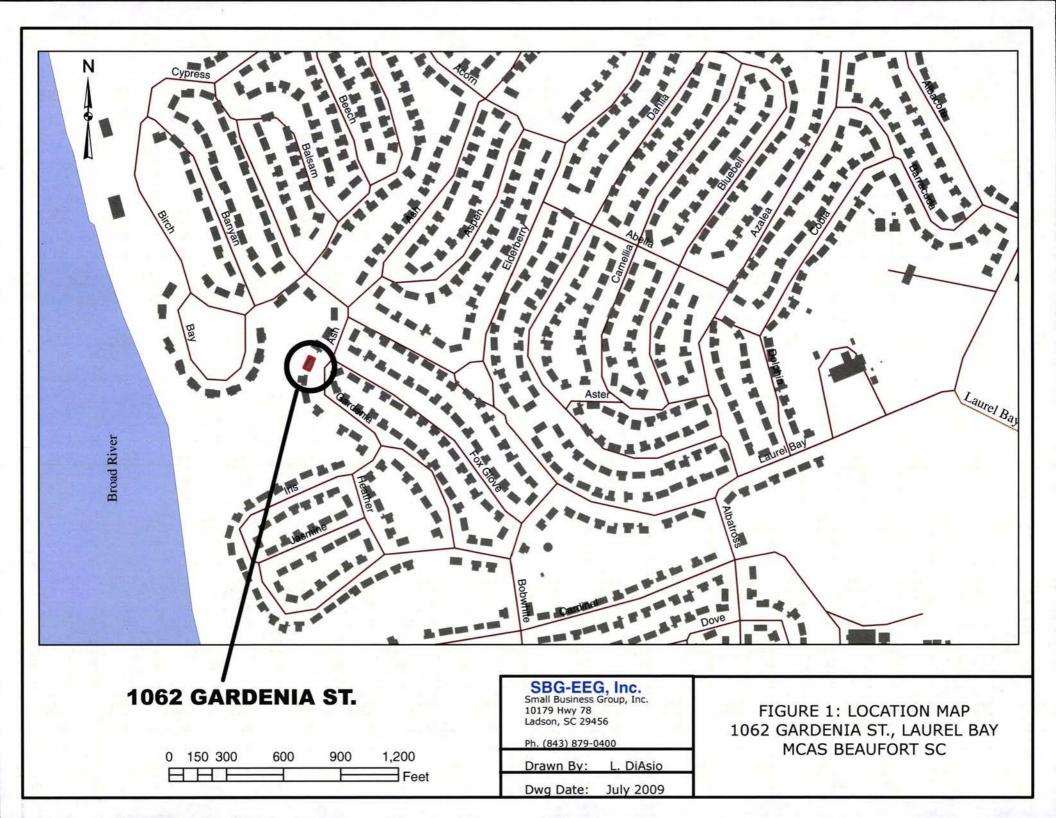
### XII. RECEPTORS

		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	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?		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.	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

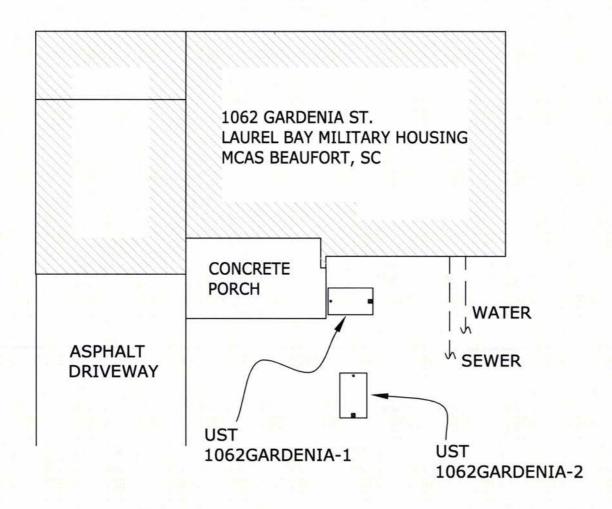
You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

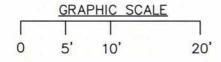
(Attach Site Map Here)









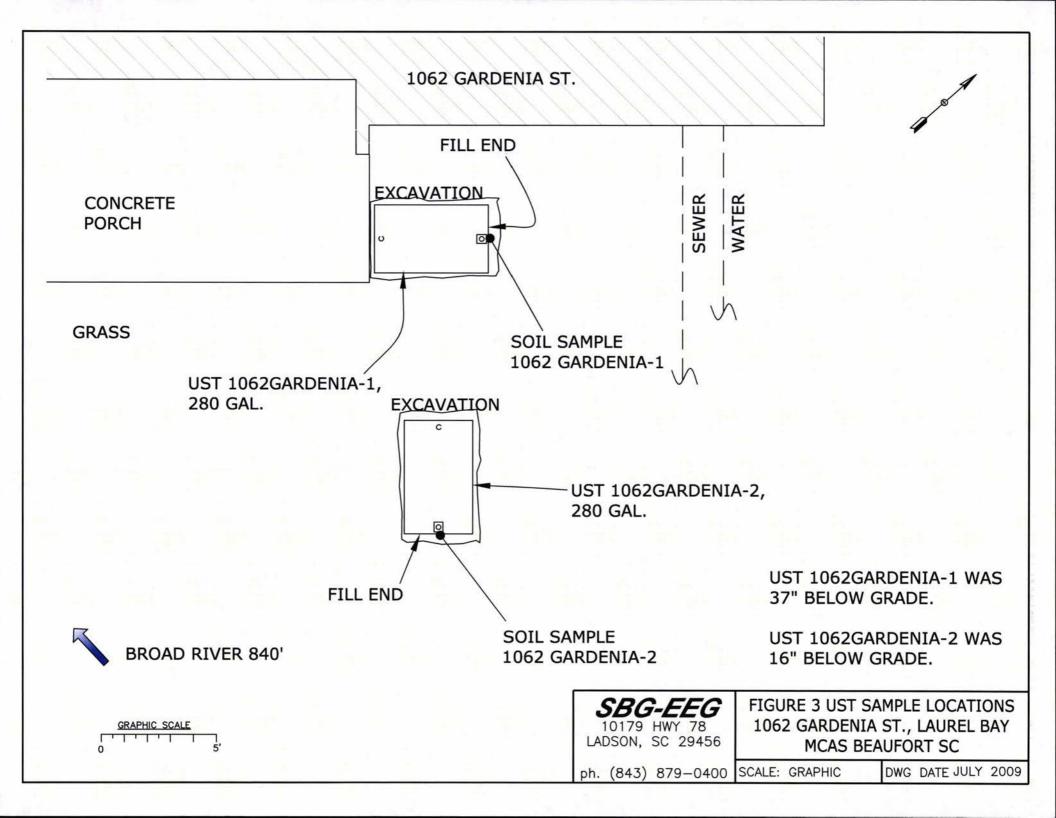


SBG-EEG 10179 HWY 78 LADSON, SC 29456

FIGURE 2 SITE MAP 1062 GARDENIA ST., LAUREL BAY MCAS BEAUFORT SC

ph. (843) 879-0400 SCALE: GRAPHIC

DWG DATE JULY 2009





Picture 1: Location of UST 1062Gardenia-1 and 2 before excavation.



Picture 2: UST 1062Gardenia-1 and 2 after backfill and restoration.

### 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	1062Gardenia	-1	1062G	ardenia	-2		
Benzene	0.171 mg/kg	<b>3</b>	ND				
Toluene	0.00591 mg	kg	ND				
Ethylbenzene	3.58 mg/kg		ND				
Xylenes	2.34 mg/kg		ND				
Naphthalene	23.0 mg/kg		ND				
Benzo (a) anthracene	4.42 mg/kg		ND				
Benzo (b) fluoranthene	2.42 mg/kg		ND				
Benzo (k) fluoranthene	1.38 mg/kg		ND				
Chrysene	4.38 mg/kg		ND				
Dibenz (a, h) anthracene	ND		ND				
TPH (EPA 3550)							
		<b>T</b>	1			1	
СоС							
Benzene						:	
Toluene							
Ethylbenzene							:
Xylenes							
Naphthalene							
Benzo (a) anthracene							
Benzo (b) fluoranthene							
Benzo (k) fluoranthene					_		
Chrysene							
Dibenz (a, h) anthracene							
TPH (EPA 3550)							

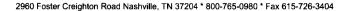
SUMMARY OF ANALYSIS RESULTS (cont'd)
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

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)

10179 Highway 78

Ladson, SC 29456

Attn:

Tom McElwee

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Nbr: P/O Nbr:

[none] 0829

06/12/09 Date Received:

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.

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.

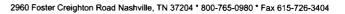
This report has been electronically signed.

Em & Adage

Report Approved By:

Ken A. Hayes

Senior Project Manager





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

(2449) Work Order:

Project Name:

Laurel Bay Housing Project

Project Number:

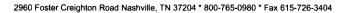
[none]

NSF1280

Received: 06/12/09 08:00

#### ANALYTICAL REPORT

					Dilution	Analysis		
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSF1280-01 (1061 Ga	rdenia - Soil) S	ampled:	06/09/09 10:00					
General Chemistry Parameters	•	•						
% Dry Solids	64.4		%	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Ethylbenzene	0.0160		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Naphthalene	0.760		mg/kg dry	0.322	50	06/18/09 20:36	SW846 8260B	9063105
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	9062143
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					06/18/09 20:36	SW846 8260B	9063105
Surr: Dibromofluoromethane (75-125%)	97 %					06/16/09 16:53	SW846 8260B	9062143
Surr: Dibromofluoromethane (75-125%)	93 %					06/18/09 20:36	SW846 8260B	9063105
Surr: Toluene-d8 (76-129%)	136 %	ZX				06/16/09 16:53	SW846 8260B	9062143
Surr: Toluene-d8 (76-129%)	97 %					06/18/09 20:36	SW846 8260B	9063105
Surr: 4-Bromofluorobenzene (67-147%)	203 %	ZX				06/16/09 16:53	SW846 8260B	9062143
Surr: 4-Bromofluorobenzene (67-147%)	103 %					06/18/09 20:36	SW846 8260B	9063105
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND		mg/kg dry	0.103	1	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
Indeno (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	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 SW846 8270D	9062159
1-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%) Surr: Nitrobenzene-d5 (17-120%)	76 % 71 %					06/17/09 21:33	SW846 8270D	9062159
Surr. Murovenzene-as (17-120%)	/1 %					06/17/09 21:33	SW846 8270D	9062159





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

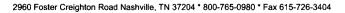
Project Name:

Laurel Bay Housing Project

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

#### ANALYTICAL REPORT

		A	ANALYTICAL REP	JKI				
Analyte	<b>5</b> . 1/	T.)	WT *4	MRL	Dilution Factor	Analysis Date/Time	Method	Dotah
Allalyte	Result	Flag	Units	WIKE	ractor	Date/Time	Method	Batch
Sample ID: NSF1280-02 (1062 Gar	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
Tolucne	0.00591		mg/kg dry	0.00197	1	06/16/09 17:24	SW846 8260B	9062143
	2.34							
Xylenes, total			mg/kg dry	0.265	50	06/18/09 21:07	SW846 8260B	9063105
Surr: 1,2-Dichloroethane-d4 (67-138%)	115 %					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%) Surr: Dibromofluoromethane (75-125%)	103 %					06/16/09 17:24	SW846 8260B	9062143
3	90 % 95 %					06/18/09 21:07	SW846 8260B	9063105
Surr: Dibromofluoromethane (75-125%) Surr: Toluene-d8 (76-129%)	3420 %	7 <i>v</i>				06/18/09 21:37	SW846 8260B SW846 8260B	9063105
Surr: Toluene-do (76-129%) Surr: Toluene-d8 (76-129%)	110 %	ZX				06/16/09 17:24 06/18/09 21:07	SW846 8260B	9062143 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 %	ZA				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
								9062159
Benzo (b) fluoranthene	2.42		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	
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		mg/kg dry	0.912	10	06/17/09 23:03	SW846 8270D	9062159
Dibenz (a,h) anthracene	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
	75.8							
2-Methylnaphthalene			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





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

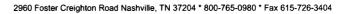
[none]

06/12/09 08:00

Received:

ANALYTICAL R	U	P	O	RT	
--------------	---	---	---	----	--

					Dilution	Analysis		
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSF1280-03 (1062 Ga	rdenia-2 - Soil	) 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	1 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 %		ing/kg ury	0.0003	1	06/17/09 21:55	SW846 8270D	9062159
Surr: 1erpnenyi-a14 (18-120%) Surr: 2-Fluorobiphenyl (14-120%)	89 % 80 %					06/17/09 21:55	SW846 8270D 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

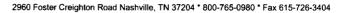
Project Number:

[none]

Received: • 06/12/09 08:00

#### ANALYTICAL REPORT

A1-4-				MDI	Dilution	Analysis	Mashad	D 4 1
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSF1280-04 (1064 Ga	rdenia - Soil) S	ampled:	06/10/09 11:40					
General Chemistry Parameters								
% Dry Solids	81.2		%	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 %					06/17/09 20:00	SW846 8260B	9063090
Surr: Dibromofluoromethane (75-125%)	97 %					06/17/09 20:00	SW846 8260B	9063096
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	906309
Polyaromatic Hydrocarbons by EPA 82	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	906215
Surr: 2-Fluorobiphenyl (14-120%)	85 %					06/17/09 22:18	SW846 8270D	906215
Surr: Nitrobenzene-d5 (17-120%)	79 %					06/17/09 22:18	SW846 8270D	906215





10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

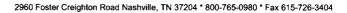
Project Number:

[none]

Received: 06/12/09 08:00

#### ANALYTICAL REPORT

A N 4 -				MDI	Dilution	Analysis	36.41.1	<b></b>
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSF1280-05 (1067 Gar	rdenia - Soil) S	ampled:	06/11/09 11:15					
General Chemistry Parameters								
% Dry Solids	81.1		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	0.00197	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	906309
Surr: Dibromofluoromethane (75-125%)	95 %					06/17/09 20:31	SW846 8260B	906309
Surr: Toluene-d8 (76-129%)	103 %					06/17/09 20:31	SW846 8260B	906309
Surr: 4-Bromofluorobenzene (67-147%)	176 %	ZX				06/17/09 20:31	SW846 8260B	906309
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		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (a) pyrene	0.977		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (b) fluoranthene	1.47		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Benzo (k) fluoranthene	0.837		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Chrysene	2.61		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Dibenz (a,h) anthracene	0.173		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Fluoranthene	10.0		mg/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
Fluorene	0.577		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	0.292		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Naphthalene	ND		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
Phenanthrene	5.38		mg/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
Pyrene	8.54		mg/kg dry	0.412	5	06/19/09 17:25	SW846 8270D	9062159
I-Methylnaphthalene	0.198		mg/kg dry	0.0825	1	06/17/09 22:40	SW846 8270D	9062159
2-Methylnaphthalene	0.233		mg/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	906215
Surr: 2-Fluorobiphenyl (14-120%)	82 %					06/17/09 22:40	SW846 8270D	906215
Surr: Nitrobenzene-d5 (17-120%)	78 %					06/17/09 22:40	SW846 8270D	906215





10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 06/12/09 08:00

#### SAMPLE EXTRACTION DATA

			Wt/Vol				Extraction
Parameter	Batch	Lab Number	Extracted	Extracted Vol	Date	Analyst	Method
Polyaromatic Hydrocarbons by I	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 Comp	ounds by EPA Method 8	3260B					
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



10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

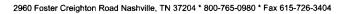
Project Number:

[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 EPA Method	8260B				
9062143-BLK1						
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
urrogate: 4-Bromofluorobenzene	127%			9062143	9062143-BLK1	06/16/09 15:01
063090-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
'urrogate: Toluene-d8	98%			9063090	9063090-BLK1	06/17/09 14:36
urrogate: 4-Bromofluorobenzene	101%			9063090	9063090-BLK1	06/17/09 14:36
063105-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
(ylenes, total	< 0.00130		mg/kg wet	9063105	9063105-BLK1	06/18/09 20:06
urrogate: 1,2-Dichloroethane-d4	98%			9063105	9063105-BLK1	06/18/09 20:06
urrogate: Dibromofluoromethane	96%			9063105	9063105-BLK1	06/18/09 20:06
Surrogate: Toluene-d8	99%			9063105	9063105-BLK1	06/18/09 20:06
urrogate: 4-Bromofluorobenzene	99%			9063105	9063105-BLK1	06/18/09 20:06
Polyaromatic Hydrocarbons by E	EPA 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
Вепло (а) рутепе	< 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

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

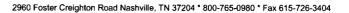
Project Number:

[none] 06/12/09 08:00

Received:

# PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbon	s by EPA 8270D			Ì		
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 McElwcc

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 06/12/09 08:00

#### PROJECT QUALITY CONTROL DATA

#### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters 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:

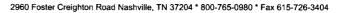
Laurel Bay Housing Project

Project Number: [none]

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 12:5
Ethylbenzene	50.0	54.3		ug/kg	109%	79 - 130	9062143	06/16/09 12:5
Naphthalene	50.0	62.0		ug/kg	124%	72 - 150	9062143	06/16/09 12:5
Toluene	50.0	51.6		ug/kg	103%	76 - 126	9062143	06/16/09 12:5
Xylenes, total	150	164		ug/kg	109%	80 - 130	9062143	06/16/09 12:5
Surrogate: 1,2-Dichloroethane-d4	50.0	45.0			90%	67 - 138	9062143	06/16/09 12:5
Surrogate: Dibromofluoromethane	50.0	49.8			100%	75 - 125	9062143	06/16/09 12:5
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9062143	06/16/09 12:5
Surrogate: 4-Bromofluorobenzene	50.0	61.4			123%	67 - 147	9062143	06/16/09 12:5
9063090-BS1								
Benzene	50.0	53.1		ug/kg	106%	78 - 126	9063090	06/17/09 13:0
Ethylbenzene	50.0	55.0		ug/kg	110%	79 - 130	9063090	06/17/09 13:0
Naphthalene	50.0	62.5		ug/kg	125%	72 - 150	9063090	06/17/09 13:0
Toluene	50.0	53.2		ug/kg	106%	76 - 126	9063090	06/17/09 13:0
Xylenes, total	150	165		ug/kg	110%	80 - 130	9063090	06/17/09 13:0
Surrogate: 1,2-Dichloroethane-d4	50.0	44.9			90%	67 - 138	9063090	06/17/09 13:
Surrogate: Dibromofluoromethane	50.0	48.2			96%	75 - 125	9063090	06/17/09 13:0
Surrogate: Toluene-d8	50.0	48.6			97%	76 - 129	9063090	06/17/09 13:
Surrogate: 4-Bromofluorobenzene	50.0	62.0			124%	67 - 147	9063090	06/17/09 13:0
9063105-BS1								
Benzene	50.0	51.8		ug/kg	104%	78 - 126	9063105	06/18/09 18:0
Ethylbenzene	50.0	48.9		ug/kg	98%	79 - 130	9063105	06/18/09 18:0
Naphthalene	50.0	50.7		ug/kg	101%	72 - 150	9063105	06/18/09 18:0
Toluene	50.0	49.5		ug/kg	99%	76 - 126	9063105	06/18/09 18:0
Xylenes, total	150	146		ug/kg	98%	80 - 130	9063105	06/18/09 18:0
Surrogate: 1,2-Dichloroethane-d4	50.0	48.7			97%	67 - 138	9063105	06/18/09 18:0
Surrogate: Dibromofluoromethane	50.0	48.6			97%	75 - 125	9063105	06/18/09 18:0
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9063105	06/18/09 18:0
Surrogate: 4-Bromofluorobenzene	50.0	50.1			100%	67 - 147	9063105	06/18/09 18:0
Polyaromatic Hydrocarbons by EP.	A 8270D							
9062159-BS1								
Acenaphthene	1.67	1.43		mg/kg wet	86%	49 - 120	9062159	06/17/09 00:4
Acenaphthylene	1.67	1.44		mg/kg wet	86%	52 - 120	9062159	06/17/09 00:4
Anthracene	1.67	1.65		mg/kg wet	99%	58 - 120	9062159	06/17/09 00:4
Benzo (a) anthracene	1.67	1.47		mg/kg wet	88%	57 - 120	9062159	06/17/09 00:4
Benzo (a) pyrene	1.67	1.53		mg/kg wet	92%	55 - 120	9062159	06/17/09 00:4
Benzo (b) fluoranthene	1.67	1.65		mg/kg wet	99%	51 - 123	9062159	06/17/09 00:
Benzo (g,h,i) perylene	1.67	1.34		mg/kg wet	80%	49 - 121	9062159	06/17/09 00:4
Benzo (k) fluoranthene	1.67	1.46			5576	., 121	9062159	06/17/09 00:





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

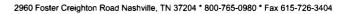
Project Number:

[none]

Received: 06/12/09 08:00

# PROJECT QUALITY CONTROL DATA LCS - Cont.

	Date/Time
120 9062159	06/17/09 00:47
123 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
122 9062159	06/17/09 00:47
107 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
120 9062159	06/17/09 00:47
0 - 8 - 4 - 0 - 8 - 6 - 8 -	5 - 120 9062159 0 - 123 9062159 8 - 120 9062159 4 - 120 9062159 0 - 122 9062159 8 - 107 9062159 6 - 120 9062159 6 - 120 9062159 8 - 120 9062159 4 - 120 9062159 4 - 120 9062159





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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

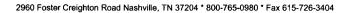
Project Number: Received:

[none]

06/12/09 08:00

#### PROJECT QUALITY CONTROL DATA **LCS Dup**

Ori	g. Val. Duplicate	Q Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by	EPA Method 826	60B								
-BSD1										
	50.4	ug/kg	50.0	101%	78 - 126	0.6	50	9062143		06/16/09 13:28
ene	53.5	ug/kg	50.0	107%	79 - 130	1	50	9062143		06/16/09 13:28
ne	65.8	ug/kg	50.0	132%	72 - 150	6	50	9062143		06/16/09 13:28
	51.5	ug/kg	50.0	103%	76 - 126	0.2	50	9062143		06/16/09 13:28
otal	161	ug/kg	150	107%	80 - 130	2	50	9062143		06/16/09 13:28
1,2-Dichloroethane-d4	45.5	ug/kg	50.0	91%	67 - 138			9062143		06/16/09 13:28
Dibromofluoromethane	48.7	ug/kg	50.0	97%	75 - 125			9062143		06/16/09 13:28
Toluene-d8	49.7	ug/kg	50.0	99%	76 - 129			9062143		06/16/09 13:28
4-Bromofluorobenzene	63.1	ug/kg	50.0	126%	67 - 147			9062143		06/16/09 13:28
-BSD1										
	52.6	ug/kg	50.0	105%	78 - 126	0.9	50	9063090		06/17/09 13:33
ene	54.2	ug/kg	50.0	108%	79 - 130	1	50	9063090		06/17/09 13:33
ne	63.6	ug/kg	50.0	127%	72 - 150	2	50	9063090		06/17/09 13:33
	53.1	ug/kg	50.0	106%	76 - 126	0.2	50	9063090		06/17/09 13:33
otal	164	ug/kg	150	109%	80 - 130	0.7	50	9063090		06/17/09 13:33
1,2-Dichloroethane-d4	44.9	ug/kg	50.0	90%	67 - 138			9063090		06/17/09 13:33
Dibromofluoromethane	47.9	ug/kg	50.0	96%	75 - 125			9063090		06/17/09 13:33
Toluene-d8	48.4	ug/kg	50.0	97%	76 - 129			9063090		06/17/09 13:33
4-Bromofluorobenzene	62.3	ug/kg	50.0	125%	67 - 147			9063090		06/17/09 13:33
-BSD1			50.0							0.5/4.0/20.4.0.4.1
	51.9	ug/kg	50.0	104%	78 - 126	0.1	50	9063105		06/18/09 18:34
ne	47.5	ug/kg	50.0	95%	79 - 130	3	50	9063105		06/18/09 18:34
ie	49.6	ug/kg	50.0	99%	72 - 150	2	50	9063105		06/18/09 18:34
	49.0	ug/kg	50.0	98%	76 - 126	1	50	9063105		06/18/09 18:34
otal	143	ug/kg 	150	95%	80 - 130	2	50	9063105		06/18/09 18:34
1,2-Dichloroethane-d4	49.7	ug/kg	50.0	99%	67 - 138			9063105		06/18/09 18:34
Dibromofluoromethane	49.9	ug/kg	50.0	100%	75 - 125			9063105		06/18/09 18:34
Toluene-d8 1-Bromofluorobenzene	50.0 50.4	ug/kg ug/kg	50.0 50.0	100% 101%	76 - 129 67 - 147			9063105 9063105		06/18/09 18:34 06/18/09 18:34
natic Hydrocarbons by EPA 8270	0D									
-BSD1	~~									
<b>-D3D1</b> ene	1.60	mg/kg wet	1.67	96%	49 - 120	11	40	9062159		06/17/09 01:09
ylene	1.60	mg/kg wet	1.67	96%	52 - 120	11	30	9062159		06/17/09 01:09
, tene	1.81	mg/kg wet	1.67	109%	58 - 120	9	50	9062159		06/17/09 01:09
inthracene	1.70	mg/kg wet	1.67	102%	57 - 120	14	30	9062159		06/17/09 01:09
pyrene	1.76	mg/kg wet	1.67	105%	55 - 120	14	33	9062159		06/17/09 01:09
luoranthene	1.69	mg/kg wet	1.67	101%	51 - 123	2	42	9062159		06/17/09 01:09
										06/17/09 01:09
i) perylene	1.53	mg/kg wet	1.67	92%	49 - 121	13	32	9062159		06/1





10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number: Received: [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:

Laurel Bay Housing Project

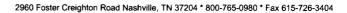
Project Number:

[none]

Received: 06/12/09 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike

				Mutrix Spir	· · · · · · · · · · · · · · · · · · ·				<u> </u>	
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								
9062143-MS1	•									
Benzene	ND	2.32		mg/kg dry	2.45	94%	42 - 141	9062143	NSF1280-05RE 1	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		ug/kg	50.0	89%	67 - 138	9062143	NSF1280-05RE	06/16/09 20:00
Surrogate: Dibromofluoromethane		48.6		ug/kg	50.0	97%	75 - 125	9062143	NSF1280-05RE	06/16/09 20:00
Surrogate: Toluene-d8		48.4		ug/kg	50.0	97%	76 - 129	9062143	NSF1280-05RE	06/16/09 20:00
Surrogate: 4-Bromofluorobenzene		51.9		ug/kg	50.0	104%	67 - 147	9062143	NSF1280-05RE 1	06/16/09 20:00
9063105-MS1										
Benzene	ND	1.82		mg/kg wet	2.20	83%	42 - 141	9063105	NSF1550-04RE I	06/19/09 00:40
Ethylbenzene	ND	1.88		mg/kg wet	2.20	86%	21 - 165	9063105	NSF1550-04RE 1	06/19/09 00:40
Naphthalene	ND	1.62		mg/kg wet	2.20	74%	10 - 160	9063105	NSF1550-04RE 1	06/19/09 00:40
Toluene	ND	1.82		mg/kg wet	2.20	83%	45 - 145	9063105	NSF1550-04RE 1	06/19/09 00:40
Xylenes, total	ND	5.61		mg/kg wet	6.59	85%	31 - 159	9063105	NSF1550-04RE 1	06/19/09 00:40
Surrogate: 1,2-Dichloroethane-d4		49.6		ug/kg	50.0	99%	67 - 138	9063105	NSF1550-04RE 1	06/19/09 00:40
Surrogate: Dibromofluoromethane		47.9		ug/kg	50.0	96%	75 - 125	9063105	NSF1550-04RE	06/19/09 00:40
Surrogate: Toluene-d8		49.0		ug/kg	50.0	98%	76 - 129	9063105	NSF1550-04RE	06/19/09 00:40
Surrogate: 4-Bromofluorobenzene		51.7		ug/kg	50.0	103%	67 - 147	9063105	NSF1550-04RE 1	06/19/09 00:40
Polyaromatic Hydrocarbons by E	CPA 8270D									
9062159-MS1	ND	1.60			201	700/	40 100	00/21/20	NEEL 200 05	07/13/00 01:30
Acenaphthene	ND	1.58		mg/kg dry	2.01	79%	42 - 120	9062159	NSF1280-05	06/17/09 01:30
Arthresone	ND	1.36		mg/kg dry	2.01	68%	32 - 120	9062159	NSF1280-05	06/17/09 01:30
Anthracene	1.07	2.29		mg/kg dry	2.01	61%	10 - 200	9062159	NSF1280-05	06/17/09 01:30
Benzo (a) anthracene	2.66	3.73		mg/kg dry	2.01	53%	41 - 120	9062159	NSF1280-05	06/17/09 01:30
Benzo (a) pyrene Benzo (b) fluoranthene	0.977 1.47	2.41 3.12		mg/kg dry mg/kg dry	2.01 2.01	71% 82%	33 - 121 26 - 137	9062159 9062159	NSF1280-05 NSF1280-05	06/17/09 01:30 06/17/09 01:30
• •				5 5						





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.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by E	PA 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	MI	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	MI	mg/kg dry	2.01	21%	37 - 120	9062159	NSF1280-05	06/17/09 01:30
Pyrene	6.90	6.24	M1	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

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time				
Selected Volatile Organic Compound	ls 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	l NSF1280-05RE	06/16/09 20:31				
Xylenes, total	ND	7.69		mg/kg dry	7.36	104%	31 - 159	3	50	9062143	1 NSF1280-05RE	06/16/09 20:31				
Surrogate: 1,2-Dichloroethane-d4		44.1		ug/kg	50.0	88%	67 - 138			9062143	1 NSF1280-05RE	06/16/09 20:31				
Surrogate: Dibromofluoromethane		48.2		ug/kg	50.0	96%	75 - 125			9062143	1 NSF1280-05RE	06/16/09 20:31				
Surrogate: Toluene-d8		48.6		ug/kg	50.0	97%	76 - 129			9062143	1 NSF1280-05RE	06/16/09 20:31				
Surrogate: 4-Bromofluorobenzene		50.3		ug/kg	50.0	101%	67 - 147			9062143	1 NSF1280-05RE	06/16/09 20:31				
											1					
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	1 NSF1550-04RE	06/19/09 01:10				
Naphthalene	ND	1.67		mg/kg wet	2.20	76%	10 - 160	3	50	9063105	1 NSF1550-04RE	06/19/09 01:10				
Toluene	ND	1.77		mg/kg wet	2.20	81%	45 - 145	2	50	9063105	1 NSF1550-04RE	06/19/09 01:10				
Xylenes, total	ND	5.54		mg/kg wet	6.59	84%	31 - 159	1	50	9063105	1 NSF1550-04RE	06/19/09 01:10				
Surrogate: 1,2-Dichloroethane-d4		49.3		ug/kg	50.0	99%	67 - 138			9063105	1 NSF1550-04RE	06/19/09 01:10				
Surrogate: Dibromofluoromethane		47.4		ug/kg	50.0	95%	75 - 125			9063105	1 NSF1550-04RE	06/19/09 01:10				
Surrogate: Toluene-d8		48.2		ug/kg	50.0	96%	76 - 129			9063105	1 NSF1550-04RE	06/19/09 01:10				
Surrogate: 4-Bromofluorobenzene		52.9		ug/kg	50.0	106%				9063105	1 NSF1550-04RE	06/19/09 01:10				
				5 6							1					
Polyaromatic Hydrocarbons by EPA	8270D															
9062159-MSD1																
Acenaphthene	ND	1.97		mg/kg dry	2.01	98%	42 - 120	22	40	9062159	NSF1280-05	06/17/09 01:52				
Acenaphthylene	ND	1.78		mg/kg dry	2.01	88%	32 - 120	27	30	9062159	NSF1280-05	06/17/09 01:52				
Anthracene	1.07	2.66		mg/kg dry	2.01	79%	10 - 200	15	50	9062159	NSF1280-05	06/17/09 01:52				
Benzo (a) anthracene	2.66	3.61		mg/kg dry	2.01	47%	41 - 120	3	30	9062159	NSF1280-05	06/17/09 01:52				
Benzo (a) pyrene	0.977	2.65		mg/kg dry	2.01	83%	33 - 121	10	33	9062159	NSF1280-05	06/17/09 01:52				
Benzo (b) fluoranthene	1.47	2.81		mg/kg dry	2.01	66%	26 - 137	11	42	9062159	NSF1280-05	06/17/09 01:52				
Benzo (g,h,i) perylene	0.0550	1.91		mg/kg dry	2.01	92%	21 - 124	25	32	9062159	NSF1280-05	06/17/09 01:52				
Benzo (k) fluoranthene	0.837	2.89		mg/kg dry	2.01	102%	14 - 140	3	39	9062159	NSF1280-05	06/17/09 01:52				



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSF1280

Project Name:

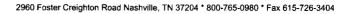
Laurel Bay Housing Project

Project Number: Received: [none]

06/12/09 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Q Units		% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by I	EPA 8270D											
9062159-MSD1												
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	MI	mg/kg dry	2.01	-5%	37 - 120	11	32	9062159	NSF1280-05	06/17/09 01:52
Pyrene	6.90	5.64	Ml	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





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

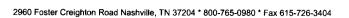
06/12/09 08:00

#### **CERTIFICATION SUMMARY**

#### TestAmerica Nashville

Attn

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





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

M1

RL1

ZX

Work Order:

NSF1280

Project Name:

Laurel Bay Housing Project

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

**DATA QUALIFIERS AND DEFINITIONS** 

The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS). Reporting limit raised due to sample matrix effects.

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

CESTAMERICAL SERVICE DE LE SER	TESTING Na	shville Division 60 Foster Creight shville, TN 37204	on		To	ii Fred	e: 615- e: 800- x: 615-	765-0	980			_			me	thods.	us in us is this v purpo	work be ses? Com	eing co npliance	er analyt nducted e Monito nent Act	ring?		Yes		ło_ ło
Client Name/Account #: E	EG # 2449											_						E	HOICEH	IEIR AC					-
	0179 Highway 78													Site Si	ate: S	C	<u> </u>	<del></del>							_
City/State/Zip: L	adson, SC 29456		- not									_		F	PO#:	<u></u>	83	٧							
Project Manager:	fom McElwee ema	ail: mcelwee@eegin	C.HET	Fax	No.: /	04	3-	37	9 -	0	40	4	1	rA Quo						<del></del>					
Telephone Number: j	843,412.2097	<del></del>		. ' 4^								_		Projec	t ID: <u>La</u>	aurel B	ay Hou	sing P	roject						
Sampler Name: (Print)	#RATTO	Shaw										_		Proje	ect #:									$\overline{}$	
Sampler Signature:					<del>- (2)</del>	Prese	vative		द्ध		Matri	x	$\Box$	<u> </u>				Ana	lyze Fo	or:	$\neg \neg$	T		1	<u> </u>
Sample ID/Description  1061 C-ARNEWITH  1062 GARDENIA-1  1064 GARDENIA  1064 GARDENIA	6/9/09 6/9/09 6/10/09 6/10/09	1000 Time Sampled 1000 25 115 5 115 5 115 5	C * * * Composite	Field Filtered	LOUN KY HNO, (Red tends) NA KY.	HCI (Blue Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	None (Black Label)		Olousand	Drinking Water	<del></del>	2	W W W BTEX + Napth - 8260	() () () () () () () () () () () () () (	Labo	ratory	Comm	nents:				d ec		RUSH TAT (Pre-Schedule
Special Instructions:		75	"""	Received		/	Shipme	nt:			6/1	Pate /	FEC		me		VOC	s Free	of Hea	Receip dspace					Y
Relinquished by:			CO rime	Receive			ca:					Date / 17	2		· O C				_						

## 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 1062Gardenia-1, and UST 1062Gardenia-2,1062 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

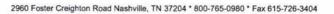
IYPE OF TANK	SIZE (GAL)
Steel	280

# **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.





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:

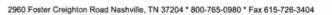
[none]

Received:

06/12/09 08:00

#### ANALYTICAL REPORT

Analyta	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Analyte						ractor		·····	Analyst	Datei
Sample ID: NSF1280-02 (1062 G	ardenia-1 - So	il) Samı	oled: 06/09	0/09 15:00						
General Chemistry Parameters										
% Dry Solids	72.2		%	0.500	0.500	1	06/24/09 09:09	SW-846	DEA	9063707
Selected Volatile Organic Compound	ds by EPA Metho	od 8260B	i .							
Benzene	0.171		mg/kg dry	0.000659	0.00197	1	06/16/09 17:24	SW846 8260B	SMS	9062143
Ethylbenzene	3.58		mg/kg dry	0.0355	0.106	50	06/18/09 21:07	SW846 8260B	SMS	9063105
Naphthalene	23.0		mg/kg dry	1.80	5.29	1000	06/18/09 21:37	SW846 8260B	SMS	9063105
Toluene	0.00591		mg/kg dry	0.000393	0.00197	1	06/16/09 17:24	SW846 8260B	SMS	9062143
Xylenes, total	2.34		mg/kg dry	0.0688	0.265	50	06/18/09 21:07	SW846 8260B	SMS	9063105
Surr: 1,2-Dichloroethane-d4 (67-138%)	115 %					1	06/16/09 17:24	SW846 8260B	SMS	906214.
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					50	06/18/09 21:07	SW846 8260B	SMS	906310.
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					1000	06/18/09 21:37	SW846 8260B	SMS	906310
Surr: Dibromofluoromethane (75-125%)	103 %					1	06/16/09 17:24	SW846 8260B	SMS	906214.
Surr: Dibromofluoromethane (75-125%)	90 %					50	06/18/09 21:07	SW846 8260B	SMS	906310.
Surr: Dibromofluoromethane (75-125%)	95 %					1000	06/18/09 21:37	SW846 8260B	SMS	906310
Surr: Toluene-d8 (76-129%)	3420 %	Z	X			1	06/16/09 17:24	SW846 8260B	SMS	906214.
Surr: Toluene-d8 (76-129%)	110 %					50	06/18/09 21:07	SW846 8260B	SMS	906310.
Surr: Toluene-d8 (76-129%)	102 %					1000	06/18/09 21:37	SW846 8260B	SMS	906310
Surr: 4-Bromofluorobenzene (67-147%)	1140%	Z.	X			1	06/16/09 17:24	SW846 8260B	SMS	906214.
Surr: 4-Bromosluorobenzene (67-147%)	104 %					50	06/18/09 21:07	SW846 8260B	SMS	906310.
Surr: 4-Bromofluorobenzene (67-147%)	103 %					1000	06/18/09 21:37	SW846 8260B	SMS	906310.
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.436	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Acenaphthylene	1.72		mg/kg dry	0.422	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Anthracene	3.41		mg/kg dry	0.449	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Benzo (a) anthracene	4.42		mg/kg dry	0.517	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Benzo (a) pyrene	1.68		mg/kg dry	0.408	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Benzo (b) fluoranthene	2.42		mg/kg dry	0.408	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.408	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Benzo (k) fluoranthene	1.38		mg/kg dry	0.408	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Chrysene	4.38		mg/kg dry	0.545	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.422	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Fluoranthene	12.4		mg/kg dry	0.463	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Fluorene	6.77		mg/kg dry	0.490	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Indeno (1,2,3-cd) pyrene	0.558	J	mg/kg dry	0.422	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Naphthalene	21.6		mg/kg dry	0.558	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Phenanthrene	20.3		mg/kg dry	0.463	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
Pyrene	11.3		mg/kg dry	0.558	0.912	10	06/17/09 23:03	SW846 8270D	jlf	9062159
1-Methylnaphthalene	48.4		mg/kg dry	2.18	4.56	50	06/19/09 17:03	SW846 8270D	jlf	9062159
2-Methylnaphthalene	75.8		mg/kg dry	2.25	4.56	50	06/19/09 17:03	SW846 8270D	jlf	9062159
Surr: Terphenyl-d14 (18-120%)	101 %			10000000	secolo #0	10	06/17/09 23:03	SW846 8270D	jlf	906215





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	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Ratch
					er sammeren					
Sample ID: NSF1280-02 (1062 G		oil) - cont	. Sampled	: 06/09/09 1	5:00					
Polyaromatic Hydrocarbons by EPA										
Surr: 2-Fluorobiphenyl (14-120%)	98%					10	06/17/09 23:03	SW846 8270D	jlf	9062159
Surr: Nitrobenzene-d5 (17-120%)	38 %					10	06/17/09 23:03	SW846 8270D	jlf	9062159
Sample ID: NSF1280-03 (1062 G General Chemistry Parameters	Gardenia-2 - S	oil) Samp	oled: 06/10	0/09 09:45						
% Dry Solids	76.6		%	0.500	0.500	1	06/24/09 09:09	SW-846	DEA	9063707
Selected Volatile Organic Compound	ds by EPA Meth	od 8260B								
Benzene	ND		mg/kg dry	0.000645	0.00193	1	06/17/09 19:29	SW846 8260B	SMS	9063090
Ethylbenzene	ND		mg/kg dry	0.000645	0.00193	1	06/17/09 19:29	SW846 8260B	SMS	9063090
Naphthalene	ND	RL1	mg/kg dry	0.0892	0.262	50	06/23/09 21:17	SW846 8260B	JJP	9063966
Toluene	ND		mg/kg dry	0.000385	0.00193	1	06/17/09 19:29	SW846 8260B	SMS	9063090
Xylenes, total	ND		mg/kg dry	0.00125	0.00481	1	06/17/09 19:29	SW846 8260B	SMS	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	89 %			31.00.120	0.00	1	06/17/09 19:29	SW846 8260B	SMS	9063090
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					50	06/23/09 21:17	SW846 8260B	JJP	9063966
Surr: Dibromofluoromethane (75-125%)	99%					1	06/17/09 19:29	SW846 8260B	SMS	9063090
Surr: Dibromofluoromethane (75-125%)	102 %					50	06/23/09 21:17	SW846 8260B	JJP	9063966
Surr: Toluene-d8 (76-129%)	133 %	ZX	(			1	06/17/09 19:29	SW846 8260B	SMS	9063090
Surr: Toluene-d8 (76-129%)	92 %					50	06/23/09 21:17	SW846 8260B	JJP	9063966
Surr: 4-Bromofluorobenzene (67-147%)	177 %	ZX	C			I	06/17/09 19:29	SW846 8260B	SMS	9063090
Surr: 4-Bromofluorobenzene (67-147%)	106 %					50	06/23/09 21:17	SW846 8260B	JJP	9063966
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	0.104		mg/kg dry	0.0412	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Acenaphthylene	ND		mg/kg dry	0.0400	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Anthracene	ND		mg/kg dry	0.0425	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Benzo (a) anthracene	ND		mg/kg dry	0.0490	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Benzo (a) pyrene	0.257		mg/kg dry	0.0387	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Benzo (b) fluoranthene	ND		mg/kg dry	0.0387	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0387	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Benzo (k) fluoranthene	ND		mg/kg dry	0.0387	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Chrysene	ND		mg/kg dry	0.0515	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0400	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Fluoranthene	ND		mg/kg dry	0.0438	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Fluorene	0.125		mg/kg dry	0.0464	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0400	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Naphthalene	ND		mg/kg dry	0.0528	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Phenanthrene	ND		mg/kg dry	0.0438	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
Pyrene	ND		mg/kg dry	0.0528	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
1-Methylnaphthalene	0.0863		mg/kg dry	0.0412	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
2-Methylnaphthalene	0.110		mg/kg dry	0.0425	0.0863	1	06/17/09 21:55	SW846 8270D	jlf	9062159
2-Methymaphthalene				0.0.23	0.0003	7.5	3011107 21.03			

additional interest Page 4 of 20
S/11/10

# Appendix C Laboratory Analytical Report - Groundwater



#### **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB1062TW02WG20150521

Laboratory ID: QE21004-019

Matrix: Aqueous

Date Sampled: 05/21/2015 1025

Run Prep Method

1

Date Received: 05/22/2015

5030B

Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 8260B 05/27/2015 1445 75865

	CAS	Analytical					
Parameter	Number	Method	Result	Q PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND	5.0	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	ND	5.0	0.17	ug/L	1
Naphthalene	91-20-3	8260B	ND	5.0	0.32	ug/L	1
Toluene	108-88-3	8260B	ND	5.0	0.16	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND	5.0	0.19	ug/L	1

Surrogate	Run 1 Ao Q % Recovery	cceptance Limits	
Bromofluorobenzene	105	75-120	
1,2-Dichloroethane-d4	102	70-120	
Toluene-d8	111	85-120	
Dibromofluoromethane	103	85-115	

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank  $J = Estimated result < PQL and <math>\geq MDL$ 

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

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

H = Out of holding time N = Recovery is out of criteria

Q = Surrogate failure L = LCS/LCSD failure 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: BEALB1062TW02WG20150521

Laboratory ID: QE21004-019

Matrix: Aqueous

Date Sampled: 05/21/2015 1025 Date Received: 05/22/2015

3520C

Run Prep Method

1

Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 8270D (SIM) 05/27/2015 2353 RBH 05/26/2015 1543 75778

CAS	Analytical						
Number	Method	Result	Q	PQL	MDL	Units	Run
56-55-3	8270D (SIM)	ND		0.20	0.019	ug/L	1
205-99-2	8270D (SIM)	ND		0.20	0.019	ug/L	1
207-08-9	8270D (SIM)	ND		0.20	0.024	ug/L	1
218-01-9	8270D (SIM)	ND		0.20	0.021	ug/L	1
53-70-3	8270D (SIM)	ND		0.20	0.040	ug/L	1
	Number 56-55-3 205-99-2 207-08-9 218-01-9	Number         Method           56-55-3         8270D (SIM)           205-99-2         8270D (SIM)           207-08-9         8270D (SIM)           218-01-9         8270D (SIM)	Number         Method         Result           56-55-3         8270D (SIM)         ND           205-99-2         8270D (SIM)         ND           207-08-9         8270D (SIM)         ND           218-01-9         8270D (SIM)         ND	Number         Method         Result         Q           56-55-3         8270D (SIM)         ND           205-99-2         8270D (SIM)         ND           207-08-9         8270D (SIM)         ND           218-01-9         8270D (SIM)         ND	Number         Method         Result         Q         PQL           56-55-3         8270D (SIM)         ND         0.20           205-99-2         8270D (SIM)         ND         0.20           207-08-9         8270D (SIM)         ND         0.20           218-01-9         8270D (SIM)         ND         0.20	Number         Method         Result         Q         PQL         MDL           56-55-3         8270D (SIM)         ND         0.20         0.019           205-99-2         8270D (SIM)         ND         0.20         0.019           207-08-9         8270D (SIM)         ND         0.20         0.024           218-01-9         8270D (SIM)         ND         0.20         0.021	Number         Method         Result         Q         PQL         MDL         Units           56-55-3         8270D (SIM)         ND         0.20         0.019         ug/L           205-99-2         8270D (SIM)         ND         0.20         0.019         ug/L           207-08-9         8270D (SIM)         ND         0.20         0.024         ug/L           218-01-9         8270D (SIM)         ND         0.20         0.021         ug/L

Run 1 **Acceptance** Surrogate Q % Recovery Limits 15-139 2-Methylnaphthalene-d10 70 Fluoranthene-d10 73 23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank J = Estimated result < PQL and ≥ MDL E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time N = Recovery is out of criteria

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

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

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



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



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

Henry C. Scott
M. David Mitchell, MD

Glenn A. McCall

BOARD:

Coleman F. Buckhouse, MD

13 August 2008

Beaufort Military Complex Family Housing ATTN: Kyle Broadfoot 1510 Laurel Bay Blvd. Beaufort, SC 29906

Re:

MCAS - Laurel Bay Housing - 1062 Gardenia

Site ID # 03974

UST Closure Reports received 31 January 2008

No Further Action Beaufort County

Dear Mr. Broadfoot:

The Department has reviewed the referenced closure report. Based upon the geotechnical data in the referenced report, the soil samples are below risk based screening levels.

As the Department did not specifically request this data, and the work conducted at this site received no prior review by the Department, we cannot provide any comments on the completeness of the work performed or the overall environmental conditions of the site. Based on the information and analytical data submitted, there is no evidence to indicate that a violation of the Pollution Control Act has occurred. Consequently, no investigation will be required at this time. Please note, this statement pertains only to the data submitted and does not apply to other areas of the site and/or any other potential regulatory violations. Further, the Department retains the right to request further investigation if deemed necessary.

Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or bishopma@dhec.sc.gov.

Sincerely.

Michael Bishop, Hydrogeologist Groundwater Quality Section

Bureau of Water

B. Thomas Knight, Manager Groundwater Quality Section

Bureau of Water

cc:

Region 8 District EQC (via pdf)

MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)

Technical File (pdf)



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 B. Templeton, Director

#### Promoting and protecting the health of the public and the environment

March 3, 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 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)

Not 3. 26

Craig Ehde (via email)



# W. Marshall Taylor Jr., Acting Director Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy

Subject: IGWA Dated 3/3/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (5 addresses/5 tanks)

322 Ash Tank 1	1062 Gardenia Tank 3
444 Elderberry Tank 2	1442 Dove Tank 2
471 Dogwood Tank 1	



#### 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	
453 Elderberry Drive	1414 Albatross Drive	
464 Dogwood Drive	1417 Albatross Drive	
466 Dogwood Drive	1421 Albatross Drive	
467 Dogwood Drive	1422 Albatross Drive	1000
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