SUMMARY REPORT
491 ELDERBERRY DRIVE (FORMERLY 450 ELDERBERRY DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and

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

JUNE 2021

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Prepared by:

CDM - AECOM Multimedia Joint Venture
10560 Arrowhead Drive, Suite 500
Fairfax, Virginia 22030

Contract Number: N62470-14-D-9016
CTO WE52
JUNE 2021

Table of Contents

Tables

Appendices

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 491 Elderberry Drive (Formerly 450 Elderberry Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 491 Elderberry Drive (Formerly 450 Elderberry Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 450 Elderberry Drive* (MCAS Beaufort, 2007). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On March 1, 2007, two 280 gallon heating oil USTs were removed from the front landscaped bed area adjacent to the house at 491 Elderberry Drive (Formerly 450 Elderberry Drive). The two tanks were located on top of one another. The former UST locations are indicated in the figure of the UST Assessment Report (Appendix B). The USTs were removed, cleaned, and

shipped offsite for recycling. There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depths to the bases of the USTs were 4'0" (Tank 1) and 8'0" (Tank 2) bgs and a single soil sample was collected for each at that depth. An additional soil sample was collected at the side of each excavation at a depth of 2'0" (Tank 1) and 6'0" (Tank 2). The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations (Tanks 1 and 2) 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 491 Elderberry Drive (Formerly 450 Elderberry Drive) during the removal of Tank 2 were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment. The soil results collected from 491 Elderberry Drive (Formerly 450 Elderberry Drive) during the removal of Tank 1 were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated October 25, 2007, SCDHEC requested an IGWA be conducted for 491 Elderberry Drive (Formerly 450 Elderberry Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On July 24, 2008, a temporary monitoring well was installed at 491 Elderberry Drive (Formerly 450 Elderberry 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 1). The former UST locations are indicated in the figures of the UST Assessment Report (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).

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 *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).

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 491 Elderberry Drive (Formerly 450 Elderberry 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 USTs at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 491 Elderberry Drive (Formerly 450 Elderberry Drive). This NFA determination was obtained in a letter dated November 25, 2008. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2007. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 450 Elderberry Drive, Laurel Bay Military Housing Area*, August 2007.

Resolution Consultants, 2008. *Initial Groundwater Investigation of Ground Water at Leaking Heating Oil UST Sites Report for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, November 2008.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 2.0*, April 2013.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.0*, May 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.1*, February 2016.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.

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

Tables

Table 1
Laboratory Analytical Results - Soil
491 Elderberry Drive (Formerly 450 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Samples Collected 03/01/07					
		450 Elderberry 1-B	450 E. 1-N	450 E. 1-S	450 E. 2-B	450 E. 2-N	450 E. 2-S
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)							
Benzene	0.003	**0.102**	ND	**0.000368**	**0.00018**	ND	ND
Ethylbenzene	1.15	**8.49**	**0.000217**	**0.0012**	**0.000256**	**0.000208**	**0.000294**
Naphthalene	0.036	**24.5**	ND	**0.00194**	ND	ND	**0.000936**
Toluene	0.627	ND	**0.000454**	**0.000915**	**0.000542**	**0.000575**	ND
Xylenes, Total	13.01	**5.35**	**0.000378**	**0.00243**	**0.000483**	**0.000368**	**0.000381**
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)							
Benzo(a)anthracene	0.66	ND	**0.299**	**0.0342**	ND	ND	ND
Benzo(b)fluoranthene	0.66	ND	**0.482**	ND	ND	ND	ND
Benzo(k)fluoranthene	0.66	ND	**0.483**	ND	ND	ND	ND
Chrysene	0.66	**1.36**	**0.376**	**0.138**	ND	ND	ND
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND	ND	ND

Notes:

[1] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 and 1.1 (SCDHEC, May 2001 and SCDHEC, February 2011) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
491 Elderberry Drive (Formerly 450 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Site-Specific Groundwater VISLs (µg/L)[2]	Results Sample Collected 07/24/08
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/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 Analyzed by EPA Method 8270D (µg/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:

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

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

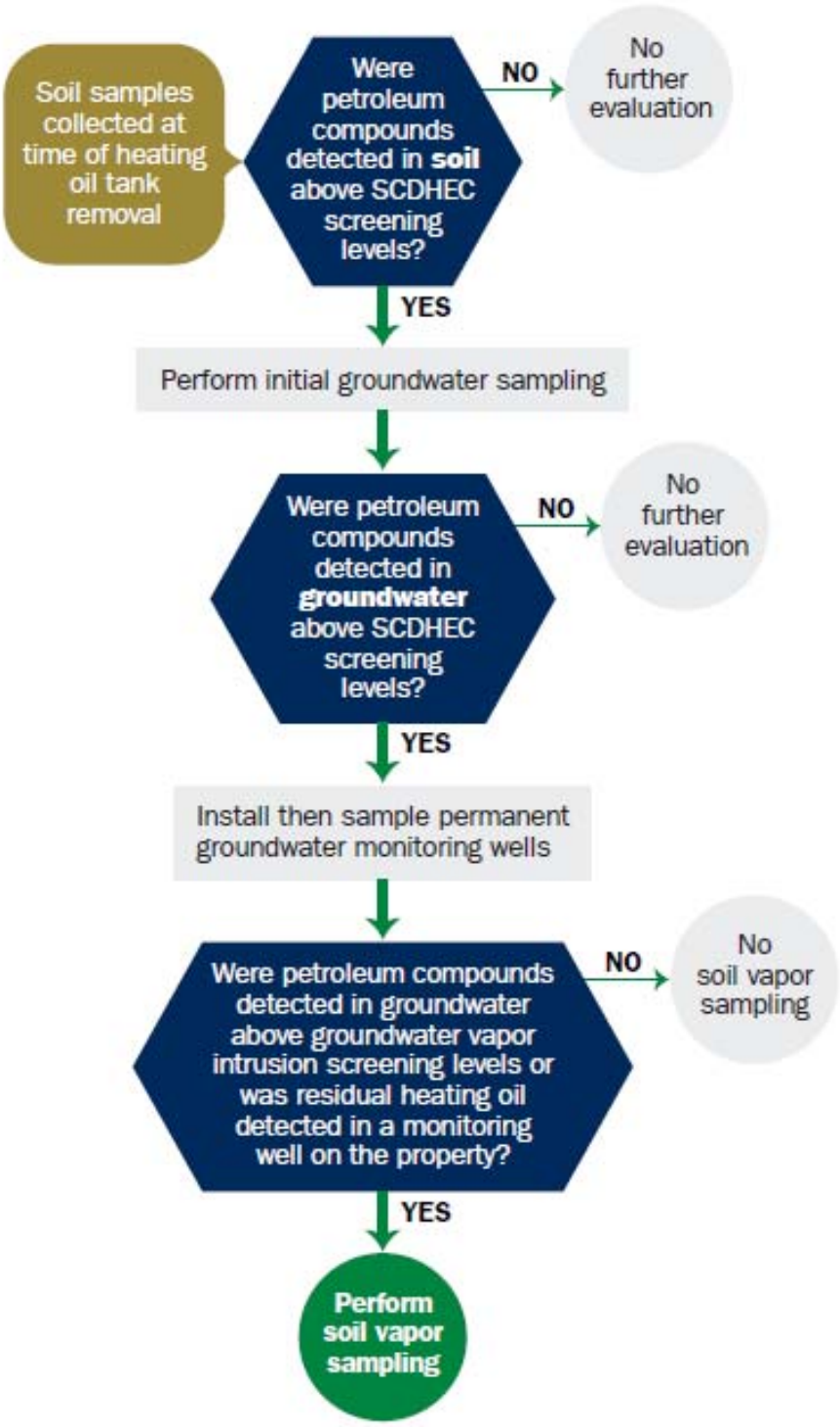
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH

CDM - AECOM
Multimedia Joint Venture



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

CDM - AECOM
Multimedia Joint Venture

..0 Elderberry

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

Date Received
State Use Only

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

RECEIVED
AUG 15 2007
Water Monitoring, Assessment & Protection Division

I. OWNERSHIP OF UST (S)

Beaufort Military Complex Family Housing
Owner Name (Corporation, Individual, Public Agency, Other)

1510 Laurel Bay Blvd.
Mailing Address

Beaufort | SC | 29906
City | State | Zip Code

843 | 379-3305 | Kyle Broadfoot
Area Code | Telephone Number | Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A
Permit I.D. #

Actus Lend Lease Construction
Facility Name or Company Site Identifier

450 Elderberry (2 Tanks)
Street Address or State Road (as applicable)

Beaufort, SC | 29906 | Beaufort
City | ZIP | County

Attachment 2

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_____, 20___.

_____
(Name)

Notary Public for the state of_____.
Please affix State seal if you are commissioned outside South Carolina

V. UST INFORMATION

		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Product...(ex. Gas, Kerosene).....	#2 DIESEL	#2 DIESEL				
B.	Capacity..(ex. 1k, 2k)..... (APPROX)	280	280G				
C.	Age.....						
D.	Construction Material..(ex. Steel, FRP).....	Steel	Steel				
E.	Month/Year of Last Use.....						
F.	Depth (ft.) To Base of Tank.....	4'	8'				
G.	Spill Prevention Equipment Y/N.....	N	N				
H.	Overfill Prevention Equipment Y/N.....	N	N				
I.	Method of Closure (Removed/Filled).....	Removed	Removed				
J.	Date Tanks Removed/Filled.....	3/1/07	3/1/07				
K.	Visible Corrosion or Pitting Y/N.....	Y	Y				
L.	Visible Holes Y/N.....	N	N				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)

Recycling - Scrap Steel

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) Solidification and Subtitle D Landfill

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Both tanks had some pitting, but no holes or apparent leaks.

VI. PIPING ...FORMATION

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A. Construction Material..(ex. Steel, FRP).....	Steel					
B. Distance from UST to Dispenser.....	N/A					
C. Number of Dispensers.....	-0-					
D. Type of System Pressure or Suction.....	N					
E. Was Piping Removed from the Ground? Y/N	Y					
F. Visible Corrosion or Pitting Y/N.....	N					
G. Visible Holes Y/N.....						
H. Age.....						

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

The original copper service line had been Removed previous to this Removal. The only piping present were the fill and vent lines. They were in GOOD SHAPE. They were Removed

VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

VIII. 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.		✓	
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. Name of DHEC representative authorizing soil removal:		✓	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		✓	

IX. SAMPL_ ..NFORMATION

A. SCDHEC Lab Certification Number DW: 84009002

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
					3/1/07		
1	SW	S	SAND	2'	14:00	A. MANUCY	ND
2	Bottom	S	SAND	4'	14:00	A. MANUCY	ND
3	SW	S	SAND	6'	15:00	A. MANUCY	ND
4	Bottom	S	SAND	8'	15:00	A. MANUCY	ND
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

X. SAMPLING METHODOLOGY

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

EPA Method 8260 B Volatile Organic Compounds
- Preservative: 2 ea Sodium Bisulfate 1 ea
EPA Method 8270 Poly Aromatic Hydrocarbons
- No Preservative

One (1) Sidewall and One (1) Bottom Sample were secured from tank excavation Samples were stored and shipped in an insulated cooler w/ ice.

XI. RECEPTORS

	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.		✓
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.		✓
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.		✓
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? If yes, indicate the area of contaminated soil on the site map.		✓

SUMMARY OF ANALYSIS RESULTS ~~[redacted]~~ N/A

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

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd) N/A

Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

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

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

TestAmerica
ANALYTICAL TESTING CORPORATION
4310 East Anderson Road Orlando, FL 800-851-2560 * Fax 407-856-0886

March 12, 2007

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order: OQC0054
Project Name: LAUREL BAY
Project Number: EP2362
Date Received: 03/03/07

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
450 ELDERBERRY 1-B	OQC0054-01	03/01/07 10:30
450 E. 1-N	OQC0054-02	03/01/07 10:30
450 E. 1-S	OQC0054-03	03/01/07 10:30
450 E. 2-B	OQC0054-04	03/01/07 10:35
450 E. 2-N	OQC0054-05	03/01/07 10:35
450 E. 2-S	OQC0054-06	03/01/07 10:35

Samples were received into laboratory at a temperature of 5.20 °C.

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. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Results are reported on a wet weight basis unless otherwise noted

The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

These results relate only to the items tested

Estimated uncertainty is available upon request.

South Carolina Certification Number: 96012001

This report has been electronically signed.

Approved By:

Enid Ortiz

TestAmerica - Orlando, FL
Enid Ortiz For Shali Brown
Project Manager

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

LABORATORY REPORT

Sample ID: 450 ELDERBERRY 1-B - Lab Number: OQC0054-01 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**81.4**		%	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	102	J3,U	ug/kg dry	102	278	500	03/05/07 18:19	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**8490**		ug/kg dry	117	278	500	03/05/07 18:19	JWT	EPA 8260B	7C06031
91-20-3	**Naphthalene**	**24500**		ug/kg dry	153	278	500	03/05/07 18:19	JWT	EPA 8260B	7C06031
108-88-3	Toluene	240	U	ug/kg dry	240	278	500	03/05/07 18:19	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**5350**		ug/kg dry	144	278	500	03/05/07 18:19	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*104 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*104 %*									
Surrogate: Dibromofluoromethane (55-145%)		*104 %*									
Surrogate: Toluene-d8 (80-117%)		*103 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	90.9	U	ug/kg dry	90.9	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	120	U	ug/kg dry	120	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	65.4	U	ug/kg dry	65.4	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
56-55-3	Benzo (a) anthracene	22.2	U	ug/kg dry	22.2	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
205-99-2	Benzo (b) fluoranthene	21.6	U	ug/kg dry	21.6	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
207-08-9	Benzo (k) fluoranthene	21.6	U	ug/kg dry	21.6	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
191-24-2	Benzo (g,h,i) perylene	21.3	U	ug/kg dry	21.3	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
50-32-8	**Benzo (a) pyrene**	**357**		ug/kg dry	25.2	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
90-12-0	1-Methylnaphthalene	103	U	ug/kg dry	103	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
218-01-9	**Chrysene**	**1360**		ug/kg dry	24.5	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	26.9	U	ug/kg dry	26.9	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
206-44-0	Fluoranthene	29.5	U	ug/kg dry	29.5	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	80.3	U	ug/kg dry	80.3	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
193-39-5	Indeno (1,2,3-cd) pyrene	26.6	U	ug/kg dry	26.6	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
91-57-6	2-Methylnaphthalene	87.5	U	ug/kg dry	87.5	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	82.4	U	ug/kg dry	82.4	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	48.4	U	ug/kg dry	48.4	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
129-00-0	Pyrene	41.7	U	ug/kg dry	41.7	205	1	03/08/07 23:20	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*10 %*	J1								
Surrogate: Nitrobenzene-d5 (19-111%)		*	J1,U								
Surrogate: Terphenyl-d14 (44-171%)		*73 %*									

LABORATORY REPORT

Sample ID: 450 E. 1-N - Lab Number: OQC0054-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**77.2**		%	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.173	J3,U	ug/kg dry	0.173	0.473	1	03/05/07 16:05	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**0.217**	J	ug/kg dry	0.200	0.473	1	03/05/07 16:05	JWT	EPA 8260B	7C06031

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

LABORATORY REPORT
Sample ID: 450 E. 1-N - Lab Number: OQC0054-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Volatile Organic Compounds by EPA Method 8260B - Cont.											
91-20-3	Naphthalene	0.261	U	ug/kg dry	0.261	0.473	1	03/05/07 16:05	JWT	EPA 8260B	7C06031
108-88-3	**Toluene**	**0.454**	I	ug/kg dry	0.408	0.473	1	03/05/07 16:05	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**0.378**	I	ug/kg dry	0.246	0.473	1	03/05/07 16:05	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*116 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*102 %*									
Surrogate: Dibromofluoromethane (55-145%)		*110 %*									
Surrogate: Toluene-d8 (80-117%)		*104 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	95.9	U	ug/kg dry	95.9	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	127	U	ug/kg dry	127	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	69.0	U	ug/kg dry	69.0	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
56-55-3	**Benzo (a) anthracene**	**299**		ug/kg dry	23.4	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
205-99-2	**Benzo (b) fluoranthene**	**482**		ug/kg dry	22.8	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
207-08-9	**Benzo (k) fluoranthene**	**483**		ug/kg dry	22.8	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
191-24-2	**Benzo (g,h,i) perylene**	**343**		ug/kg dry	22.4	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
50-32-8	Benzo (a) pyrene	26.6	U	ug/kg dry	26.6	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
90-12-0	1-Methylnaphthalene	109	U	ug/kg dry	109	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
218-01-9	**Chrysene**	**376**		ug/kg dry	25.9	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	28.4	U	ug/kg dry	28.4	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
206-44-0	**Fluoranthene**	**214**	I	ug/kg dry	31.1	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	84.7	U	ug/kg dry	84.7	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
193-39-5	**Indeno (1,2,3-cd) pyrene**	**311**		ug/kg dry	28.0	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
91-57-6	**2-Methylnaphthalene**	**233**		ug/kg dry	92.2	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	86.9	U	ug/kg dry	86.9	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	51.0	U	ug/kg dry	51.0	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
129-00-0	**Pyrene**	**728**		ug/kg dry	44.0	216	1	03/08/07 23:44	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*66 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*61 %*									
Surrogate: Terphenyl-d14 (44-171%)		*118 %*									

LABORATORY REPORT
Sample ID: 450 E. 1-S - Lab Number: OQC0054-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**85.5**		%	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	**Benzene**	**0.368**	J3,I	ug/kg dry	0.192	0.526	1	03/06/07 14:56	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**1.20**		ug/kg dry	0.222	0.526	1	03/06/07 14:56	JWT	EPA 8260B	7C06031
91-20-3	**Naphthalene**	**1.94**		ug/kg dry	0.291	0.526	1	03/06/07 14:56	JWT	EPA 8260B	7C06031
108-88-3	**Toluene**	**0.915**		ug/kg dry	0.454	0.526	1	03/06/07 14:56	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**2.43**		ug/kg dry	0.273	0.526	1	03/06/07 14:56	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*128 %*									

TestAmerica - Orlando, FL
Enid Ortiz For Shali Brown
Project Manager

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

LABORATORY REPORT

Sample ID: 450 E. 1-S - Lab Number: OQC0054-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Volatile Organic Compounds by EPA Method 8260B - Cont.											
Surrogate: 4-Bromofluorobenzene (59-118%)		*87 %*									
Surrogate: Dibromofluoromethane (55-145%)		*114 %*									
Surrogate: Toluene-d8 (80-117%)		*100 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	86.5	U	ug/kg dry	86.5	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	114	U	ug/kg dry	114	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	62.3	U	ug/kg dry	62.3	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
56-55-3	**Benzo (a) anthracene**	**34.2**	I	ug/kg dry	21.1	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
205-99-2	Benzo (b) fluoranthene	20.6	U	ug/kg dry	20.6	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
207-08-9	Benzo (k) fluoranthene	20.6	U	ug/kg dry	20.6	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
191-24-2	Benzo (g,h,i) perylene	20.3	U	ug/kg dry	20.3	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
50-32-8	Benzo (a) pyrene	24.0	U	ug/kg dry	24.0	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
90-12-0	1-Methylnaphthalene	98.0	U	ug/kg dry	98.0	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
218-01-9	**Chrysene**	**138**	I	ug/kg dry	23.4	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	25.6	U	ug/kg dry	25.6	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
206-44-0	Fluoranthene	28.1	U	ug/kg dry	28.1	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	76.4	U	ug/kg dry	76.4	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
193-39-5	Indeno (1,2,3-cd) pyrene	25.3	U	ug/kg dry	25.3	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
91-57-6	**2-Methylnaphthalene**	**384**		ug/kg dry	83.3	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	78.4	U	ug/kg dry	78.4	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	46.1	U	ug/kg dry	46.1	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
129-00-0	Pyrene	39.7	U	ug/kg dry	39.7	195	1	03/09/07 00:52	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*74 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*77 %*									
Surrogate: Terphenyl-d14 (44-171%)		*171 %*									

LABORATORY REPORT

Sample ID: 450 E. 2-B - Lab Number: OQC0054-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**79.8**		%	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.180	J3,U	ug/kg dry	0.180	0.493	1	03/05/07 16:22	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**0.256**	I	ug/kg dry	0.208	0.493	1	03/05/07 16:22	JWT	EPA 8260B	7C06031
91-20-3	Naphthalene	0.272	U	ug/kg dry	0.272	0.493	1	03/05/07 16:22	JWT	EPA 8260B	7C06031
108-88-3	**Toluene**	**0.542**		ug/kg dry	0.425	0.493	1	03/05/07 16:22	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**0.483**	I	ug/kg dry	0.256	0.493	1	03/05/07 16:22	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*122 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*100 %*									
Surrogate: Dibromofluoromethane (55-145%)		*110 %*									
Surrogate: Toluene-d8 (80-117%)		*103 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

LABORATORY REPORT

Sample ID: 450 E. 2-B - Lab Number: OQC0054-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	92.7	U	ug/kg dry	92.7	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	122	U	ug/kg dry	122	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	66.7	U	ug/kg dry	66.7	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
56-55-3	Benzo (a) anthracene	22.7	U	ug/kg dry	22.7	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
205-99-2	Benzo (b) fluoranthene	22.0	U	ug/kg dry	22.0	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
207-08-9	Benzo (k) fluoranthene	22.0	U	ug/kg dry	22.0	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
191-24-2	Benzo (g,h,i) perylene	21.7	U	ug/kg dry	21.7	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
50-32-8	Benzo (a) pyrene	25.8	U	ug/kg dry	25.8	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
90-12-0	1-Methylnaphthalene	105	U	ug/kg dry	105	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
218-01-9	Chrysene	25.0	U	ug/kg dry	25.0	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	27.5	U	ug/kg dry	27.5	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
206-44-0	Fluoranthene	30.1	U	ug/kg dry	30.1	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	81.9	U	ug/kg dry	81.9	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
193-39-5	Indeno (1,2,3-cd) pyrene	27.1	U	ug/kg dry	27.1	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
91-57-6	2-Methylnaphthalene	89.2	U	ug/kg dry	89.2	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	84.0	U	ug/kg dry	84.0	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	49.4	U	ug/kg dry	49.4	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
129-00-0	Pyrene	42.5	U	ug/kg dry	42.5	209	1	03/09/07 01:16	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*81 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*67 %*									
Surrogate: Terphenyl-d14 (44-171%)		*181 %*	J1								

LABORATORY REPORT

Sample ID: 450 E. 2-N - Lab Number: OQC0054-05 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**87.6**		%.	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.173	J3,U	ug/kg dry	0.173	0.472	1	03/05/07 16:39	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**0.208**	I	ug/kg dry	0.200	0.472	1	03/05/07 16:39	JWT	EPA 8260B	7C06031
91-20-3	Naphthalene	0.261	U	ug/kg dry	0.261	0.472	1	03/05/07 16:39	JWT	EPA 8260B	7C06031
108-88-3	**Toluene**	**0.575**		ug/kg dry	0.407	0.472	1	03/05/07 16:39	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**0.368**	I	ug/kg dry	0.245	0.472	1	03/05/07 16:39	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*113 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*103 %*									
Surrogate: Dibromofluoromethane (55-145%)		*108 %*									
Surrogate: Toluene-d8 (80-117%)		*103 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	84.5	U	ug/kg dry	84.5	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	111	U	ug/kg dry	111	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	60.8	U	ug/kg dry	60.8	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
56-55-3	Benzo (a) anthracene	20.6	U	ug/kg dry	20.6	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

LABORATORY REPORT
Sample ID: 450 E. 2-N - Lab Number: OQC0054-05 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
205-99-2	Benzo (b) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
207-08-9	Benzo (k) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
191-24-2	Benzo (g,h,i) perylene	19.8	U	ug/kg dry	19.8	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
50-32-8	Benzo (a) pyrene	23.5	U	ug/kg dry	23.5	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
90-12-0	1-Methylnaphthalene	95.7	U	ug/kg dry	95.7	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
218-01-9	Chrysene	22.8	U	ug/kg dry	22.8	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	25.0	U	ug/kg dry	25.0	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
206-44-0	Fluoranthene	27.4	U	ug/kg dry	27.4	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	74.6	U	ug/kg dry	74.6	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
193-39-5	Indeno (1,2,3-cd) pyrene	24.7	U	ug/kg dry	24.7	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
91-57-6	2-Methylnaphthalene	81.3	U	ug/kg dry	81.3	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	76.6	U	ug/kg dry	76.6	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	45.0	U	ug/kg dry	45.0	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
129-00-0	Pyrene	38.7	U	ug/kg dry	38.7	191	1	03/09/07 01:41	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*68 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*64 %*									
Surrogate: Terphenyl-d14 (44-171%)		*176 %*	J1								

LABORATORY REPORT
Sample ID: 450 E. 2-S - Lab Number: OQC0054-06 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**82.8**		%.	0.100	0.100	1	03/05/07 15:40	RRP	EPA 160.3	7C05025
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.199	J3,U	ug/kg dry	0.199	0.544	1	03/05/07 16:56	JWT	EPA 8260B	7C06031
100-41-4	**Ethylbenzene**	**0.294**	I	ug/kg dry	0.230	0.544	1	03/05/07 16:56	JWT	EPA 8260B	7C06031
91-20-3	**Naphthalene**	**0.936**		ug/kg dry	0.301	0.544	1	03/05/07 16:56	JWT	EPA 8260B	7C06031
108-88-3	Toluene	0.470	U	ug/kg dry	0.470	0.544	1	03/05/07 16:56	JWT	EPA 8260B	7C06031
1330-20-7	**Xylenes, total**	**0.381**	I	ug/kg dry	0.283	0.544	1	03/05/07 16:56	JWT	EPA 8260B	7C06031
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*128 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*106 %*									
Surrogate: Dibromofluoromethane (55-145%)		*112 %*									
Surrogate: Toluene-d8 (80-117%)		*105 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	89.4	U	ug/kg dry	89.4	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
208-96-8	Acenaphthylene	118	U	ug/kg dry	118	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
120-12-7	Anthracene	64.3	U	ug/kg dry	64.3	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
56-55-3	Benzo (a) anthracene	21.8	U	ug/kg dry	21.8	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
205-99-2	Benzo (b) fluoranthene	21.2	U	ug/kg dry	21.2	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
207-08-9	Benzo (k) fluoranthene	21.2	U	ug/kg dry	21.2	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
191-24-2	Benzo (g,h,i) perylene	20.9	U	ug/kg dry	20.9	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
50-32-8	Benzo (a) pyrene	24.8	U	ug/kg dry	24.8	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005

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Received: 03/03/07

LABORATORY REPORT

Sample ID: 450 E. 2-S - Lab Number: OQC0054-06 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
90-12-0	**1-Methylnaphthalene**	**118**	I	ug/kg dry	101	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
218-01-9	Chrysene	24.1	U	ug/kg dry	24.1	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
53-70-3	Dibenz (a,h) anthracene	26.5	U	ug/kg dry	26.5	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
206-44-0	Fluoranthene	29.0	U	ug/kg dry	29.0	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
86-73-7	Fluorene	78.9	U	ug/kg dry	78.9	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
193-39-5	Indeno (1,2,3-cd) pyrene	26.1	U	ug/kg dry	26.1	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
91-57-6	**2-Methylnaphthalene**	**256**		ug/kg dry	86.0	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
91-20-3	Naphthalene	81.0	U	ug/kg dry	81.0	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
85-01-8	Phenanthrene	47.6	U	ug/kg dry	47.6	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
129-00-0	Pyrene	41.0	U	ug/kg dry	41.0	202	1	03/09/07 02:05	LCS	EPA 8270C	7C05005
Surrogate: 2-Fluorobiphenyl (24-121%)		*69 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*65 %*									
Surrogate: Terphenyl-d14 (44-171%)		*182 %*	J1								

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Received: 03/03/07

SAMPLE EXTRACTION DATA

Parameter	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Method
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-01	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-02	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-03	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-04	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-05	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQC0054-06	30.0 g	1.0 mL	03/05/2007	YGM	EPA 3545 MS

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Project: LAUREL BAY
Project Number: EP2362

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Received: 03/03/07

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
General Chemistry Parameters					
% Solids	100		%	7C05025	7C05025-BLK1
Volatile Organic Compounds by EPA Method 8260B					
Benzene	0.183	U	ug/kg wet	7C06031	7C06031-BLK1
Ethylbenzene	0.212	U	ug/kg wet	7C06031	7C06031-BLK1
Naphthalene	0.276	U	ug/kg wet	7C06031	7C06031-BLK1
Toluene	0.432	U	ug/kg wet	7C06031	7C06031-BLK1
Xylenes, total	0.260	U	ug/kg wet	7C06031	7C06031-BLK1
Surrogate: 1,2-Dichloroethane-d4	53.9		ug/kg wet	7C06031	7C06031-BLK1
Surrogate: 4-Bromofluorobenzene	50.7		ug/kg wet	7C06031	7C06031-BLK1
Surrogate: Dibromofluoromethane	52.5		ug/kg wet	7C06031	7C06031-BLK1
Surrogate: Toluene-d8	51.7		ug/kg wet	7C06031	7C06031-BLK1
Polynuclear Aromatic Hydrocarbons by EPA Method 8270					
Acenaphthene	74.0	U	ug/kg wet	7C05005	7C05005-BLK1
Acenaphthylene	97.7	U	ug/kg wet	7C05005	7C05005-BLK1
Anthracene	53.2	U	ug/kg wet	7C05005	7C05005-BLK1
Benzo (a) anthracene	18.1	U	ug/kg wet	7C05005	7C05005-BLK1
Benzo (b) fluoranthene	17.6	U	ug/kg wet	7C05005	7C05005-BLK1
Benzo (k) fluoranthene	17.6	U	ug/kg wet	7C05005	7C05005-BLK1
Benzo (g,h,i) perylene	17.3	U	ug/kg wet	7C05005	7C05005-BLK1
Benzo (a) pyrene	20.6	U	ug/kg wet	7C05005	7C05005-BLK1
1-Methylnaphthalene	83.8	U	ug/kg wet	7C05005	7C05005-BLK1
Chrysene	20.0	U	ug/kg wet	7C05005	7C05005-BLK1
Dibenz (a,h) anthracene	21.9	U	ug/kg wet	7C05005	7C05005-BLK1
Fluoranthene	24.0	U	ug/kg wet	7C05005	7C05005-BLK1
Fluorene	65.4	U	ug/kg wet	7C05005	7C05005-BLK1
Indeno (1,2,3-cd) pyrene	21.6	U	ug/kg wet	7C05005	7C05005-BLK1
2-Methylnaphthalene	71.2	U	ug/kg wet	7C05005	7C05005-BLK1
Naphthalene	67.1	U	ug/kg wet	7C05005	7C05005-BLK1
Phenanthrene	39.4	U	ug/kg wet	7C05005	7C05005-BLK1
Pyrene	33.9	U	ug/kg wet	7C05005	7C05005-BLK1
Surrogate: 2-Fluorobiphenyl	2750		ug/kg wet	7C05005	7C05005-BLK1
Surrogate: Nitrobenzene-d5	2700		ug/kg wet	7C05005	7C05005-BLK1
Surrogate: Terphenyl-d14	2500		ug/kg wet	7C05005	7C05005-BLK1

PROJECT QUALITY CONTROL DATA
Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
General Chemistry Parameters								
% Solids	81.4	81.4		%	0	20	7C05025	OQC0054-01

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PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val	Analyzed Val	Q	Units	% Rec.	Target Range	Q.C. Batch
General Chemistry Parameters							
% Solids	1000	1020		%	102	90 - 110	7C05025
Volatile Organic Compounds by EPA Method 8260B							
Benzene	50.0	59.8	J3	ug/kg wet	120	76 - 117	7C06031
Ethylbenzene	50.0	57.9		ug/kg wet	116	71 - 128	7C06031
Naphthalene	50.0	53.9		ug/kg wet	108	72 - 126	7C06031
Toluene	50.0	59.1		ug/kg wet	118	65 - 128	7C06031
Xylenes, total	150	176		ug/kg wet	117	68 - 120	7C06031
Surrogate: 1,2-Dichloroethane-d4	50.0	51.7		ug/kg wet	103	73 - 137	7C06031
Surrogate: 4-Bromofluorobenzene	50.0	53.0		ug/kg wet	106	59 - 118	7C06031
Surrogate: Dibromofluoromethane	50.0	51.6		ug/kg wet	103	55 - 145	7C06031
Surrogate: Toluene-d8	50.0	51.4		ug/kg wet	103	80 - 117	7C06031
Polynuclear Aromatic Hydrocarbons by EPA Method 8270							
Acenaphthene	3330	2880		ug/kg wet	86	51 - 124	7C05005
Acenaphthylene	3330	2840		ug/kg wet	85	58 - 124	7C05005
Anthracene	3330	2660		ug/kg wet	80	61 - 122	7C05005
Benzo (a) anthracene	3330	2920		ug/kg wet	88	51 - 139	7C05005
Benzo (b) fluoranthene	3330	2820		ug/kg wet	85	57 - 129	7C05005
Benzo (k) fluoranthene	3330	3100		ug/kg wet	93	53 - 127	7C05005
Benzo (g,h,i) perylene	3330	2910		ug/kg wet	87	34 - 123	7C05005
Benzo (a) pyrene	3330	3030		ug/kg wet	91	65 - 109	7C05005
1-Methylnaphthalene		2870		ug/kg wet		18 - 115	7C05005
Chrysene	3330	2290		ug/kg wet	69	55 - 130	7C05005
Dibenz (a,h) anthracene	3330	2930		ug/kg wet	88	48 - 125	7C05005
Fluoranthene	3330	3250		ug/kg wet	98	58 - 129	7C05005
Fluorene	3330	2320		ug/kg wet	70	61 - 128	7C05005
Indeno (1,2,3-cd) pyrene	3330	2900		ug/kg wet	87	44 - 126	7C05005
2-Methylnaphthalene		3020		ug/kg wet		20 - 125	7C05005
Naphthalene	3330	2900		ug/kg wet	87	23 - 118	7C05005
Phenanthrene	3330	2580		ug/kg wet	77	61 - 120	7C05005
Pyrene	3330	3220		ug/kg wet	97	45 - 141	7C05005
Surrogate: 2-Fluorobiphenyl	3330	2640		ug/kg wet	79	24 - 121	7C05005
Surrogate: Nitrobenzene-d5	3330	2580		ug/kg wet	77	19 - 111	7C05005
Surrogate: Terphenyl-d14	3330	4150		ug/kg wet	125	44 - 171	7C05005

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Received: 03/03/07

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked
Volatile Organic Compounds by EPA Method 8260B									
Benzene	0.923	53.6		ug/kg wet	46.2	114	18 - 126	7C06031	OQC0050-02
Ethylbenzene	6.43	53.6		ug/kg wet	46.2	102	12 - 120	7C06031	OQC0050-02
Naphthalene	<0.255	31.0		ug/kg wet	46.2	67	10 - 125	7C06031	OQC0050-02
Toluene	0.615	51.4		ug/kg wet	46.2	110	10 - 130	7C06031	OQC0050-02
Xylenes, total	3.44	143		ug/kg wet	139	100	10 - 126	7C06031	OQC0050-02
Surrogate: 1,2-Dichloroethane-d4		53.1		ug/kg wet	50.0	106	73 - 137	7C06031	OQC0050-02
Surrogate: 4-Bromofluorobenzene		52.0		ug/kg wet	50.0	104	59 - 118	7C06031	OQC0050-02
Surrogate: Dibromofluoromethane		51.7		ug/kg wet	50.0	103	55 - 145	7C06031	OQC0050-02
Surrogate: Toluene-d8		51.2		ug/kg wet	50.0	102	80 - 117	7C06031	OQC0050-02
Polynuclear Aromatic Hydrocarbons by EPA Method 8270									
Acenaphthene	<74.0	2910		ug/kg wet	3330	87	40 - 125	7C05005	OQC0048-02
Acenaphthylene	<97.7	3330		ug/kg wet	3330	100	44 - 125	7C05005	OQC0048-02
Anthracene	<53.2	2860		ug/kg wet	3330	86	53 - 121	7C05005	OQC0048-02
Benzo (a) anthracene	<18.1	2920		ug/kg wet	3330	88	46 - 135	7C05005	OQC0048-02
Benzo (b) fluoranthene	<17.6	2850		ug/kg wet	3330	86	44 - 136	7C05005	OQC0048-02
Benzo (k) fluoranthene	<17.6	2800		ug/kg wet	3330	84	43 - 131	7C05005	OQC0048-02
Benzo (g,h,i) perylene	<17.3	2940		ug/kg wet	3330	88	34 - 123	7C05005	OQC0048-02
Benzo (a) pyrene	<20.6	3010		ug/kg wet	3330	90	51 - 115	7C05005	OQC0048-02
1-Methylnaphthalene	<83.8	3070		ug/kg wet			11 - 112	7C05005	OQC0048-02
Chrysene	<20.0	2270		ug/kg wet	3330	68	48 - 126	7C05005	OQC0048-02
Dibenz (a,h) anthracene	<21.9	3000		ug/kg wet	3330	90	38 - 119	7C05005	OQC0048-02
Fluoranthene	<24.0	3010		ug/kg wet	3330	90	33 - 138	7C05005	OQC0048-02
Fluorene	<65.4	2730		ug/kg wet	3330	82	48 - 128	7C05005	OQC0048-02
Indeno (1,2,3-cd) pyrene	<21.6	2940		ug/kg wet	3330	88	37 - 117	7C05005	OQC0048-02
2-Methylnaphthalene	136	2620		ug/kg wet			11 - 122	7C05005	OQC0048-02
Naphthalene	<67.1	2760		ug/kg wet	3330	83	15 - 116	7C05005	OQC0048-02
Phenanthrene	<39.4	2750		ug/kg wet	3330	83	52 - 123	7C05005	OQC0048-02
Pyrene	<33.9	3350		ug/kg wet	3330	101	31 - 155	7C05005	OQC0048-02
Surrogate: 2-Fluorobiphenyl		2920		ug/kg wet	3330	88	24 - 121	7C05005	OQC0048-02
Surrogate: Nitrobenzene-d5		2690		ug/kg wet	3330	81	19 - 111	7C05005	OQC0048-02
Surrogate: Terphenyl-d14		3770		ug/kg wet	3330	113	44 - 171	7C05005	OQC0048-02

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PROJECT QUALITY CONTROL DATA

Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
Volatile Organic Compounds by EPA Method 8260B										
Benzene	0.923	41.6		ug/kg wet	45.2	90	25	30	7C06031	OQC0050-02
Ethylbenzene	6.43	36.2	J4	ug/kg wet	45.2	66	39	30	7C06031	OQC0050-02
Naphthalene	<0.250	15.6	J4	ug/kg wet	45.2	35	66	30	7C06031	OQC0050-02
Toluene	0.615	37.9		ug/kg wet	45.2	82	30	30	7C06031	OQC0050-02
Xylenes, total	3.44	93.8	J4	ug/kg wet	136	66	42	30	7C06031	OQC0050-02
Surrogate: 1,2-Dichloroethane-d4		53.6		ug/kg wet	50.0	107			7C06031	OQC0050-02
Surrogate: 4-Bromofluorobenzene		51.9		ug/kg wet	50.0	104			7C06031	OQC0050-02
Surrogate: Dibromofluoromethane		52.6		ug/kg wet	50.0	105			7C06031	OQC0050-02
Surrogate: Toluene-d8		51.7		ug/kg wet	50.0	103			7C06031	OQC0050-02
Polynuclear Aromatic Hydrocarbons by EPA Method 8270										
Acenaphthene	<74.0	2830		ug/kg wet	3330	85	3	60	7C05005	OQC0048-02
Acenaphthylene	<97.7	2980		ug/kg wet	3330	89	11	51	7C05005	OQC0048-02
Anthracene	<53.2	2810		ug/kg wet	3330	84	2	60	7C05005	OQC0048-02
Benzo (a) anthracene	<18.1	2840		ug/kg wet	3330	85	3	46	7C05005	OQC0048-02
Benzo (b) fluoranthene	<17.6	2710		ug/kg wet	3330	81	5	60	7C05005	OQC0048-02
Benzo (k) fluoranthene	<17.6	2700		ug/kg wet	3330	81	4	60	7C05005	OQC0048-02
Benzo (g,h,i) perylene	<17.3	2830		ug/kg wet	3330	85	4	38	7C05005	OQC0048-02
Benzo (a) pyrene	<20.6	2850		ug/kg wet	3330	86	5	48	7C05005	OQC0048-02
1-Methylnaphthalene	<83.8	2600		ug/kg wet			17	60	7C05005	OQC0048-02
Chrysene	<20.0	2250		ug/kg wet	3330	68	0.9	36	7C05005	OQC0048-02
Dibenz (a,h) anthracene	<21.9	2910		ug/kg wet	3330	87	3	60	7C05005	OQC0048-02
Fluoranthene	<24.0	3020		ug/kg wet	3330	91	0.3	63	7C05005	OQC0048-02
Fluorene	<65.4	2410		ug/kg wet	3330	72	12	49	7C05005	OQC0048-02
Indeno (1,2,3-cd) pyrene	<21.6	2890		ug/kg wet	3330	87	2	60	7C05005	OQC0048-02
2-Methylnaphthalene	136	2480		ug/kg wet			5	71	7C05005	OQC0048-02
Naphthalene	<67.1	2410		ug/kg wet	3330	72	14	81	7C05005	OQC0048-02
Phenanthrene	<39.4	2530		ug/kg wet	3330	76	8	60	7C05005	OQC0048-02
Pyrene	<33.9	3340		ug/kg wet	3330	100	0.3	90	7C05005	OQC0048-02
Surrogate: 2-Fluorobiphenyl		2480		ug/kg wet	3330	74			7C05005	OQC0048-02
Surrogate: Nitrobenzene-d5		2320		ug/kg wet	3330	70			7C05005	OQC0048-02
Surrogate: Terphenyl-d14		3470		ug/kg wet	3330	104			7C05005	OQC0048-02

4310 East Anderson Road Orlando, FL 800-851-2560 * Fax 407-856-0886

Client: EPG, INC.
PO BOX 1096
MT PLEASANT, SC 29465
Attn: JOHN MAHONEY

Work Order: OQC0054
Project: LAUREL BAY
Project Number: EP2362

Sampled: 03/01/07
Received: 03/03/07

CERTIFICATION SUMMARY

TestAmerica - Orlando, FL

Method	Matrix	Nelac	South Carolina
EPA 160.3	Solid/Soil		
EPA 8260B	Solid/Soil	X	X
EPA 8270C	Solid/Soil	X	X

DATA QUALIFIERS AND DEFINITIONS

I	Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations in this range are estimated.
J1	Surrogate recovery limits have been exceeded.
J3	The reported value failed to meet the established quality control criteria for either precision and/or accuracy.
J4	The sample matrix interfered with the ability to make an accurate determination.
U	The compound was analyzed for but not detected

ADDITIONAL COMMENTS

When insufficient sample volume is received for Matrix Spike and Matrix Spike Duplicate, Laboratory Control Spike and Laboratory Control Spike Duplicate data is used for batch QC.

Results are reported on a wet weight basis unless otherwise noted.

TestAmerica - Orlando, FL
Enid Ortiz For Shali Brown
Project Manager

ANALYTICAL TESTING CORPORATION
4310 East Anderson Road * Orlando, FL 32812 * 407-851-2560 * Fax: 407-856-0886 * 800-851-

Client: EPG, INC. Project: OQC0054

Shipped By: Fed Ex Tracking Number: 861315845675

Cooler Received On: 03/03/07 10:00 And Opened On (Date/time): 3/5 10:25

Received By: Jessica Batura Logged in by: Jessica Batura

Were custody seals on the outside of cooler? **YES** √ **NO** ___ If Yes # ___ Location ___

Were custody seals intact? **YES** √ **NO** ___ **N/A** ___ (no seals present)

Chain of Custody Complete? **YES** ___ **NO** √ If No Discrepancy no matrix

Cooler Temparture When Opened: 5.20 Degrees Celsius

Temparture Blank Included: **YES** ___ **NO** √

Packing Material: Bubblewrap √ NONE ___ Other: plastic

Received on Ice: **YES** √ **NO** ___ Other: ___ Total # Of Containers: 12 # Vials 18

Any Bottles Broken? **YES** ___ **NO** √ If Yes Which One(s)? ___

Any Missing Samples? **YES** ___ **NO** √ If Yes Which One(s)? ___

pH Levels: H2SO4 <=2? ___ HNO3 <=2? ___ HCL <=2? ___ NaOH >=10? ___

Of Containers Unpreserved between 6 and 8? 24, 6 methanol

Any Air Bubbles in VOA Vials? **YES** ___ **NO** √ **N/A** ___ (no VOA vials received)

Was there enough sample shipped in each container? **YES** √ **NO** ___

Correct Preservatives Used? **YES** √ **NO** ___ If No, please explain: ___

Project Manager: Shali Brown

Corrective Actions Taken 450 Elderberry 1-B has 2 vials with no sample date or time.
450 E. 1-N has one vial with no sample date or time.
Lab received soils - Lab logged in the matrix As soils.

DQC0054

TestAmerica
ANALYTICAL TESTING CORPORATION

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

Client Name: EPG   Client #: 2411
Address:
City/State/Zip Code:
Project Manager:
Telephone Number: Fax:
Sampler Name: (Print Name) Al Manucy
Sampler Signature: A. Manucy

Project Name: Laurel Bay
Project #: EP2362
Site/Location ID: Beaufort   State: SC
Report To: J. Mahoney
Invoice To:
Quote #:   PO#:

Standard
Rush (surcharges may apply)
Date Needed:
Fax Results: Y N

QC Deliverables: None; X Level 2 (Batch QC); Level 3; Level 4; Other:

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix (SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other)	HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	BTEX + Naph	PAH-8270	REMARKS	
450 Elderberry 1-B	3-1-07	10:30														01
450 E. 1-N	3-1	10:30														02
450 E. 1-S	3-1	10:30														03
450 E. 2-B	3-1	10:35														04
450 E. 2-N	3-1	10:35														05
450 E. 2-S	3-1	10:35														06

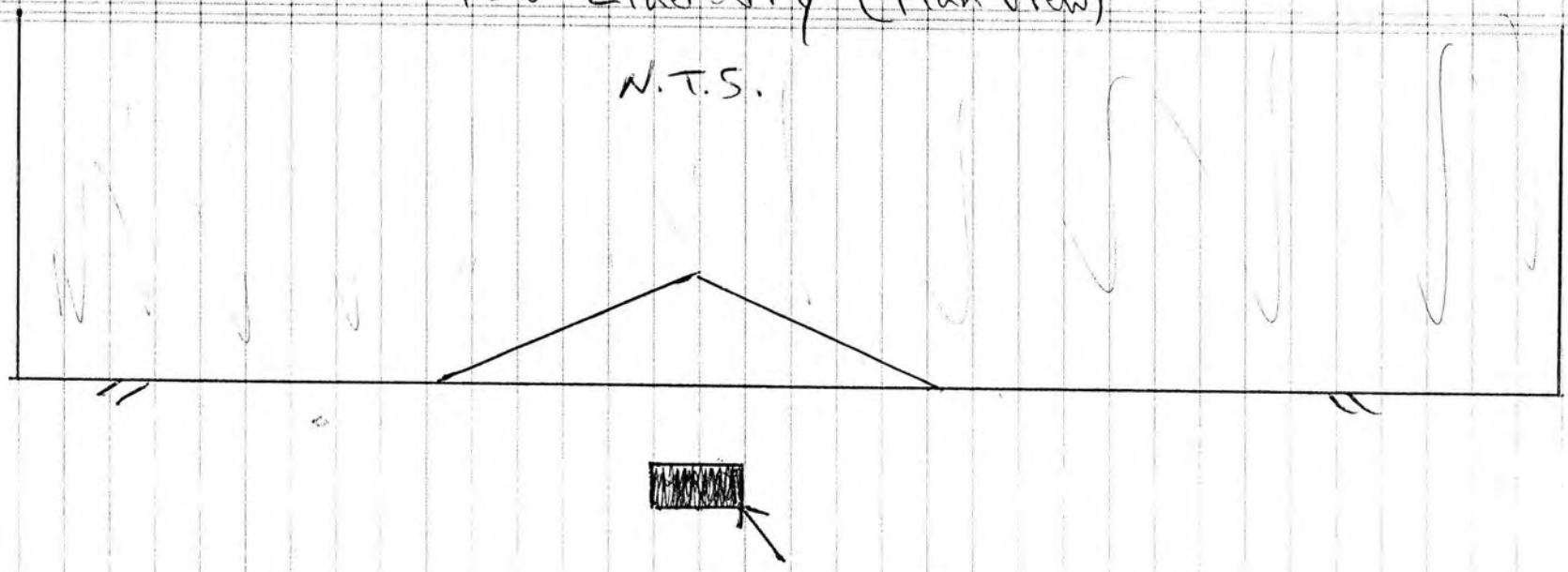
Special Instructions:

Relinquished By	Date	Time	Received By	Date	Time
A. Manucy	3/2/07	0900	J. Bradford	3/2/07	0900
J. Bradford	3/2/07	1730	J. [illegible]	3/3	10:00

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp: 5.2
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
8613,1584.5675/
Method of Shipment: FedEx to TA-Orlando

450 Elderberry (Plan View)

N.T.S.




06.06.2007 15:31

Appendix C
Laboratory Analytical Report - Groundwater

CDM - AECOM
Multimedia Joint Venture

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: LAUREL BAY SAMPLING 7/24/08
Pace Project No.: 9224221

Sample: 447 Elderberry A **Lab ID: 9224221004** Collected: 07/24/08 16:00 Received: 07/26/08 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535							
Nitrobenzene-d5 (S)	51	%	50-150	1	07/29/08 00:00	07/30/08 22:53	4165-60-0	
2-Fluorobiphenyl (S)	58	%	50-150	1	07/29/08 00:00	07/30/08 22:53	321-60-8	
Terphenyl-d14 (S)	57	%	50-150	1	07/29/08 00:00	07/30/08 22:53	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		07/31/08 02:00	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/31/08 02:00	100-41-4	
Naphthalene	ND	ug/L	1.0	1		07/31/08 02:00	91-20-3	
Toluene	ND	ug/L	1.0	1		07/31/08 02:00	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		07/31/08 02:00	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		07/31/08 02:00	95-47-6	
4-Bromofluorobenzene (S)	95	%	87-109	1		07/31/08 02:00	460-00-4	
Dibromofluoromethane (S)	103	%	85-115	1		07/31/08 02:00	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120	1		07/31/08 02:00	17060-07-0	
Toluene-d8 (S)	99	%	70-120	1		07/31/08 02:00	2037-26-5	

Sample: 450 Elderberry A **Lab ID: 9224221005** Collected: 07/24/08 16:20 Received: 07/26/08 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535							
Acenaphthene	ND	ug/L	10.0	1	07/29/08 00:00	07/30/08 23:21	83-32-9	
Acenaphthylene	ND	ug/L	7.5	1	07/29/08 00:00	07/30/08 23:21	208-96-8	
Anthracene	ND	ug/L	0.25	1	07/29/08 00:00	07/30/08 23:21	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.50	1	07/29/08 00:00	07/30/08 23:21	56-55-3	
Benzo(a)pyrene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	1.5	1	07/29/08 00:00	07/30/08 23:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	207-08-9	
Chrysene	ND	ug/L	0.50	1	07/29/08 00:00	07/30/08 23:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	53-70-3	
Fluoranthene	ND	ug/L	1.5	1	07/29/08 00:00	07/30/08 23:21	206-44-0	
Fluorene	ND	ug/L	1.6	1	07/29/08 00:00	07/30/08 23:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	193-39-5	
1-Methylnaphthalene	ND	ug/L	10.0	1	07/29/08 00:00	07/30/08 23:21	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1	07/29/08 00:00	07/30/08 23:21	91-57-6	
Naphthalene	ND	ug/L	7.5	1	07/29/08 00:00	07/30/08 23:21	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	07/29/08 00:00	07/30/08 23:21	85-01-8	
Pyrene	ND	ug/L	0.50	1	07/29/08 00:00	07/30/08 23:21	129-00-0	
Nitrobenzene-d5 (S)	58	%	50-150	1	07/29/08 00:00	07/30/08 23:21	4165-60-0	
2-Fluorobiphenyl (S)	62	%	50-150	1	07/29/08 00:00	07/30/08 23:21	321-60-8	
Terphenyl-d14 (S)	76	%	50-150	1	07/29/08 00:00	07/30/08 23:21	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		07/31/08 02:24	71-43-2	

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(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: LAUREL BAY SAMPLING 7/24/08
Pace Project No.: 9224221

Sample: 450 Elderberry A **Lab ID: 9224221005** Collected: 07/24/08 16:20 Received: 07/26/08 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Ethylbenzene	ND	ug/L	1.0	1		07/31/08 02:24	100-41-4	
Naphthalene	ND	ug/L	1.0	1		07/31/08 02:24	91-20-3	
Toluene	ND	ug/L	1.0	1		07/31/08 02:24	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		07/31/08 02:24	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		07/31/08 02:24	95-47-6	
4-Bromofluorobenzene (S)	95	%	87-109	1		07/31/08 02:24	460-00-4	
Dibromofluoromethane (S)	104	%	85-115	1		07/31/08 02:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120	1		07/31/08 02:24	17060-07-0	
Toluene-d8 (S)	102	%	70-120	1		07/31/08 02:24	2037-26-5	

Sample: 473 Dogwood A **Lab ID: 9224221006** Collected: 07/24/08 16:50 Received: 07/26/08 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535							
Acenaphthene	ND	ug/L	2.0	1	07/29/08 00:00	07/30/08 23:48	83-32-9	
Acenaphthylene	ND	ug/L	1.5	1	07/29/08 00:00	07/30/08 23:48	208-96-8	
Anthracene	ND	ug/L	0.050	1	07/29/08 00:00	07/30/08 23:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/29/08 00:00	07/30/08 23:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.30	1	07/29/08 00:00	07/30/08 23:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/29/08 00:00	07/30/08 23:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	53-70-3	
Fluoranthene	ND	ug/L	0.30	1	07/29/08 00:00	07/30/08 23:48	206-44-0	
Fluorene	ND	ug/L	0.31	1	07/29/08 00:00	07/30/08 23:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.0	1	07/29/08 00:00	07/30/08 23:48	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.0	1	07/29/08 00:00	07/30/08 23:48	91-57-6	
Naphthalene	ND	ug/L	1.5	1	07/29/08 00:00	07/30/08 23:48	91-20-3	
Phenanthrene	ND	ug/L	0.20	1	07/29/08 00:00	07/30/08 23:48	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/29/08 00:00	07/30/08 23:48	129-00-0	
Nitrobenzene-d5 (S)	54	%	50-150	1	07/29/08 00:00	07/30/08 23:48	4165-60-0	
2-Fluorobiphenyl (S)	59	%	50-150	1	07/29/08 00:00	07/30/08 23:48	321-60-8	
Terphenyl-d14 (S)	79	%	50-150	1	07/29/08 00:00	07/30/08 23:48	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		07/31/08 02:48	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/31/08 02:48	100-41-4	
Naphthalene	ND	ug/L	1.0	1		07/31/08 02:48	91-20-3	
Toluene	ND	ug/L	1.0	1		07/31/08 02:48	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		07/31/08 02:48	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		07/31/08 02:48	95-47-6	
4-Bromofluorobenzene (S)	96	%	87-109	1		07/31/08 02:48	460-00-4	

Appendix D
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

D H E C

PROMOTE PROTECT PROSPER

25 October 2007

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

Re: MCAS – Laurel Bay Housing – 450 Elderberry
Site ID # 03722
UST Closure Reports received 15 August 2007
Beaufort County

Dear Mr. Broadfoot:

The purpose of this letter is to verify a release of fuel oil at the referenced residence. According to information received by the Department, the source of the release is from past onsite use of fuel oil USTs. To date, initial activities by the facility have included tank removal and soil sampling. Based on the information contained in the closure report, a potential violation of the South Carolina Pollution Control Act has occurred in that there has been an unauthorized release of petroleum to the environment.

Additional assessment activities are required for this site. Specifically the Department requests that a groundwater sampling proposal be generated for this site.

Please submit a groundwater sampling proposal to conduct the necessary assessment and/or remedial measures at this site no later than 29 February 2007. 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

cc: Region 8 District EQC
United States Marine Corps Air Station, Commanding Officer, Attention: S-4 NREAO (William Drawdy), P.O. Box 55001, Beaufort, SC 29904-5001
Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

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

25 November 2008

Commanding Officer
ATTN: S-4 NREAO (Craig Ehde)
MCAS
PO Box 55001
Beaufort, SC 29904-5001

Re: MCAS – Laurel Bay Housing – 450 Elderberry
Site ID # 03722
Groundwater Sampling Results received 6 November 2008
Beaufort County

Dear Mr. Ehde:

Per the Department's request, a groundwater sample was collected from the referenced site. The groundwater results were reported as non-detect. Based on the information and analytical data submitted, the Department recognizes that MCAS has adequately addressed the known environmental contamination identified on the property to date in accordance with the approved scope of work. Consequently, no further investigation is required at this time. Please note, this statement pertains only to the portion of the site addressed in the referenced report 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 803-896-4179 (office phone), 803-896-6245 (fax) or cookejt@dhec.sc.gov.

Sincerely,
AST Petroleum Restoration
& Site Environmental Investigations Section
Land Revitalization Division
Bureau of Land and Waste Management
SC Dept. of Health & Environmental Control

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

cc: Region 8 District EQC
Tri-Command Communities; Attn: Mr. Robert Bible; 600 Laurel Bay Road Beaufort, SC 29906
Technical File