

**SUMMARY REPORT  
39 JASMINE STREET (FORMERLY 1169 JASMINE STREET)  
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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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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## Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	BACKGROUND INFORMATION.....	1
1.2	UST REMOVAL AND ASSESSMENT PROCESS.....	2
<b>2.0</b>	<b>SAMPLING ACTIVITIES AND RESULTS .....</b>	<b>3</b>
2.1	UST REMOVAL AND SOIL SAMPLING .....	3
2.2	SOIL ANALYTICAL RESULTS.....	4
2.3	GROUNDWATER SAMPLING.....	4
2.4	GROUNDWATER ANALYTICAL RESULTS .....	5
<b>3.0</b>	<b>PROPERTY STATUS.....</b>	<b>5</b>
<b>4.0</b>	<b>REFERENCES .....</b>	<b>5</b>

## Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Groundwater

## Appendices

Appendix A	Multi-Media Selection Process for LBMH
Appendix B	UST Assessment Report
Appendix C	Laboratory Analytical Report - Groundwater
Appendix D	Regulatory Correspondence

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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 39 Jasmine Street (Formerly 1169 Jasmine Street). 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 39 Jasmine Street (Formerly 1169 Jasmine Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1169 Jasmine Street* (MCAS Beaufort, 2009). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

### **2.1 UST Removal and Soil Sampling**

On October 1, 2007, two 280 gallon heating oil USTs were removed at 39 Jasmine Street (Formerly 1169 Jasmine Street). Tank 1 was removed from the landscaped bed area, adjacent to the house at the western portion of the front yard. Tank 2 was removed from the landscaped bed area, adjacent to the house at the eastern portion of the front yard. The

former UST locations are indicated in the figures 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 5'6" (Tank 1) and 4'7" (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 the excavation for each tank at a depth of 3'8" (Tank 1) and 3'4" (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 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 the former UST locations (Tanks 1 and 2) at 39 Jasmine Street (Formerly 1169 Jasmine Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 20, 2009, SCDHEC requested IGWAs be conducted at the former UST locations (Tanks 1 and 2) at 39 Jasmine Street (Formerly 1169 Jasmine Street) 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 25, 2013, two temporary monitoring wells were installed at 39 Jasmine Street (Formerly 1169 Jasmine Street), 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 wells were placed in the same general location as the former heating oil USTs (on the property surrounding the former location of Tanks 1 and 2). The former UST locations are indicated in the figures of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring wells. 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 wells were 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 – July 2013* (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 39 Jasmine Street (Formerly 1169 Jasmine Street) 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 39 Jasmine Street (Formerly 1169 Jasmine Street). This NFA determination was obtained in a letter dated August 6, 2015. SCDHEC's NFA letter is provided in Appendix D.

## **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1169 Jasmine Street, Laurel Bay Military Housing Area*, March 2009.

Resolution Consultants, 2015. *Initial Groundwater Investigation Report – July 2013 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2015.

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

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

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

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

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

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

## Tables

**Table 1**  
**Laboratory Analytical Results - Soil**  
**39 Jasmine Street (Formerly 1169 Jasmine Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 10/01/07			
		1169 Jasmine Bottom 01	1169 Jasmine Side 02	1169 Jasmine Bottom 03	1169 Jasmine Side 04
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND	ND	ND	ND
Ethylbenzene	1.15	ND	ND	0.00016	ND
Naphthalene	0.036	0.00034	ND	0.000778	ND
Toluene	0.627	ND	ND	ND	ND
Xylenes, Total	13.01	ND	ND	ND	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	0.0528	ND	ND	ND
Benzo(b)fluoranthene	0.66	0.0448	ND	ND	ND
Benzo(k)fluoranthene	0.66	0.0257	ND	ND	ND
Chrysene	0.66	0.0708	ND	ND	ND
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND

**Notes:**

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - 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**  
**39 Jasmine Street (Formerly 1169 Jasmine Street)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 07/26/13
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	<b>0.49</b>
Ethylbenzene	700	45.95	<b>1.9</b>
Naphthalene	25	29.33	<b>20</b>
Toluene	1000	105,445	<b>0.17</b>
Xylenes, Total	10,000	2,133	<b>0.17</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
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:**

<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  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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



Appendix A - Multi-Media Selection Process for LBMH

**Appendix B**  
**UST Assessment Report**



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

**I. OWNERSHIP OF UST (S)**

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	

**II. SITE IDENTIFICATION AND LOCATION**

Permit I.D. #	N/A
Facility Name or Company Site Identifier	Actus Lend Lease, LLC
Street Address or State Road (as applicable)	1169 JASMINE ST.
City	Beaufort, SC 29906
	Beaufort County

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

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
#2 Fuel	#2 FUEL				
280 G	280G				
Steel	STEEL				
66"	55"				
N	N				
N	N				
Removal					
10-1-07	10-1-07				
Y	Y				
Y	Y				

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). Republic- Broadhurst Landfill

Solidification & Subtitle D Landfill

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST

TANK 1 HAD MANY SMALL HOLES ALL AROUND.

TANK 2 HAD PREVIOUSLY BEEN CUT OPEN AND FILLED WITH DIRT.

## VI. PIPING INFORMATION

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Steel	STEEL				
N/A	N/A				
-0-	-0-				
Suction	Suction				
Y	Y				
N	N				
N	N				

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

## VII. BRIEF SITE DESCRIPTION AND HISTORY

RESIDENTIAL HOME HEATING OIL TANK

## VIII. SITE CONDITIONS

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

## IX. SAMPLE INFORMATION

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 #
					10-1-07		
1	BOTTOM	SOIL	SAND	66"	1100	ECHIVARRIA	
2	SIDE	↓	↓	44"	1100	↓	
3	BOTTOM	↓	↓	55"	1200	↓	
4	SIDE	↓	↓	40"	1200	↓	
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 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

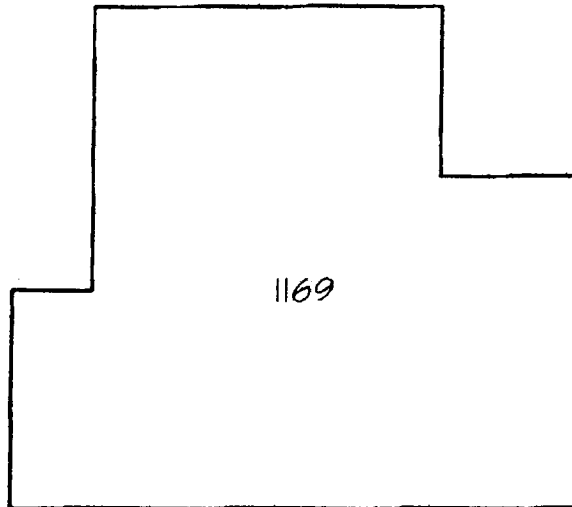
	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?  If yes, indicate type of receptor, distance, and direction on site map.		X
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?  If yes, indicate type of well, distance, and direction on site map.		X
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.		X
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.		X
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.		X



## **SITE MAP**

**You must supply a scaled 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)



TANK 2 BASE 55"

TANK 1 BASE 66"

JASMINE STREET

TANK 1 EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 44"

B-SOIL TEST BOTTOM SAMPLE @ 66"

TANK 2 EXCAVATION

C-SOIL TEST SIDE SAMPLE @ 40"

D-SOIL TEST BOTTOM SAMPLE @ 55"



CUSTOMER :

BEAUFORT MILITARY COMPLEX FAMILY HOUSING

SITE ADDRESS :

1169 JASMINE STREET

SCALE :

1/16"=1'-0"

SUPPLIER :

EPG INC.

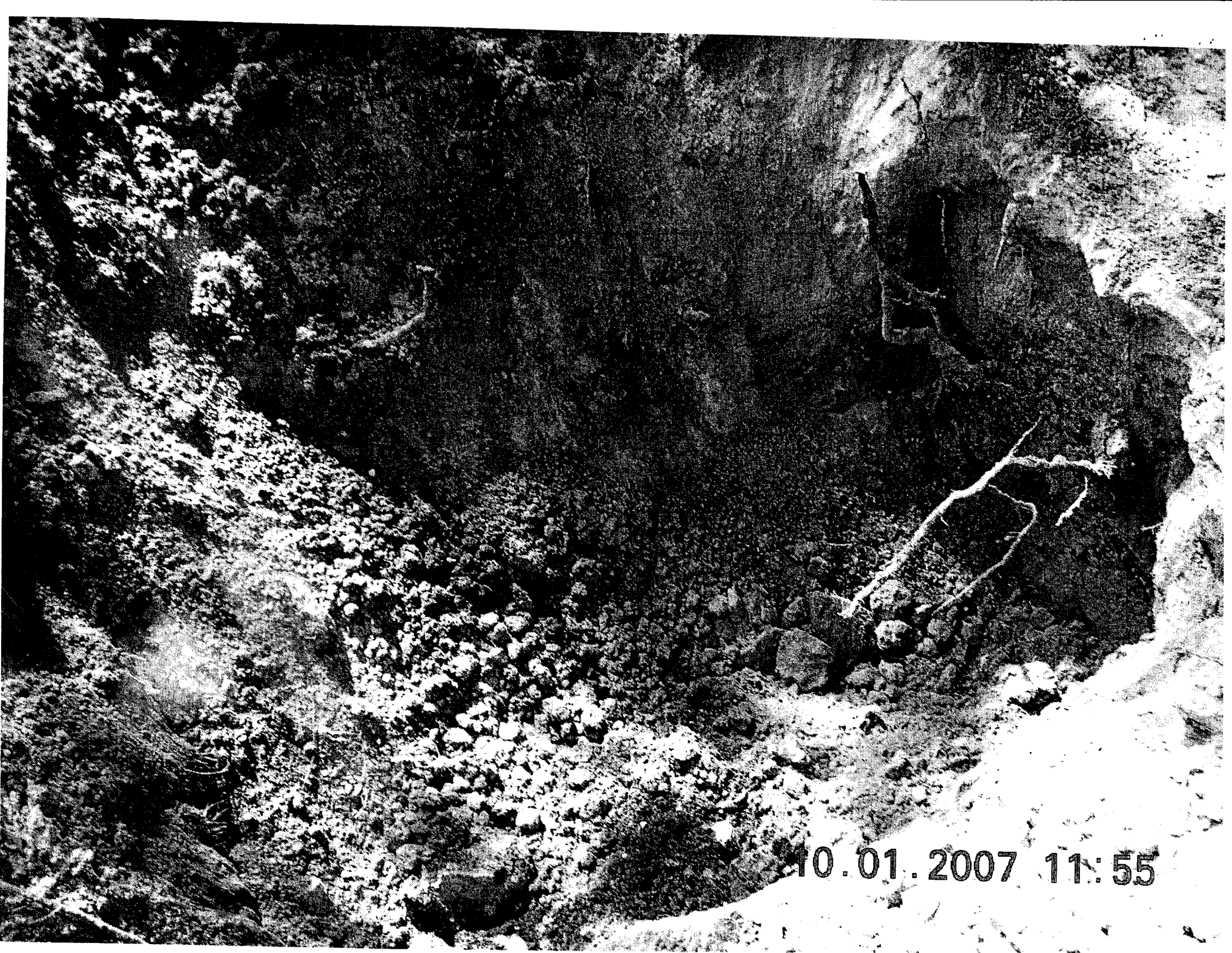
DATE :

10/14/2007

EPG INC.

P.O. BOX 1096

MOUNT PLEASANT, SC 29465-1096



10.01.2007 11:55



10.01.2007 11:09

# SUMMARY OF ANALYSIS RESULTS

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)**

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)*

## **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 ALL 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)**



October 16, 2007

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

Attn: JOHN MAHONEY

Work Order: OQJ0057  
Project Name: LAUREL BAY  
Project Number: EP2362  
Date Received: 10/03/07

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1169 JASMINE BOTTOM 01	OQJ0057-01	10/01/07 11:00
1169 JASMINE SIDE 02	OQJ0057-02	10/01/07 11:00
1169 JASMINE BOTTOM 03	OQJ0057-03	10/01/07 12:00
1169 JASMINE SIDE 04	OQJ0057-04	10/01/07 12:00

Samples were received into laboratory at a temperature of 5.80 °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.

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.

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.

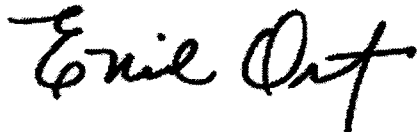
These results relate only to the items tested

Estimated uncertainty is available upon request.

South Carolina Certification Number: 96012001

This report has been electronically signed.

Approved By:



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: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## LABORATORY REPORT

Sample ID: 1169 JASMINE BOTTOM 01 - Lab Number: OQJ0057-01 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	92.2		%	0.100	0.100	1	10/03/07 18:50	RRP	EPA 160.3	7J03035
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.124	U	ug/kg dry	0.124	0.340	1	10/03/07 19:40	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	0.144	U	ug/kg dry	0.144	0.340	1	10/03/07 19:40	JWT	EPA 8260B	7J03029
91-20-3	Naphthalene	0.340		ug/kg dry	0.188	0.340	1	10/03/07 19:40	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.294	U	ug/kg dry	0.294	0.340	1	10/03/07 19:40	JWT	EPA 8260B	7J03029
1330-20-7	Xylenes, total	0.177	U	ug/kg dry	0.177	0.340	1	10/03/07 19:40	JWT	EPA 8260B	7J03029
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		119 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		94 %									
Surrogate: Dibromofluoromethane (55-145%)		102 %									
Surrogate: Toluene-d8 (80-117%)		93 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	80.2	U	ug/kg dry	80.2	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
208-96-8	Acenaphthylene	106	U	ug/kg dry	106	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
120-12-7	Anthracene	57.7	U	ug/kg dry	57.7	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
56-55-3	Benzo (a) anthracene	52.8	I	ug/kg dry	19.6	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
205-99-2	Benzo (b) fluoranthene	44.8	I	ug/kg dry	19.1	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
207-08-9	Benzo (k) fluoranthene	25.7	I	ug/kg dry	19.1	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
191-24-2	Benzo (g,h,i) perylene	18.8	U	ug/kg dry	18.8	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
50-32-8	Benzo (a) pyrene	24.6	I	ug/kg dry	22.3	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
90-12-0	1-Methylnaphthalene	90.9	U	ug/kg dry	90.9	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
218-01-9	Chrysene	70.8	I	ug/kg dry	21.7	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
53-70-3	Dibenz (a,h) anthracene	23.8	U	ug/kg dry	23.8	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
206-44-0	Fluoranthene	26.0	U	ug/kg dry	26.0	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
86-73-7	Fluorene	70.9	U	ug/kg dry	70.9	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
193-39-5	Indeno (1,2,3-cd) pyrene	23.4	U	ug/kg dry	23.4	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
91-57-6	2-Methylnaphthalene	77.2	U	ug/kg dry	77.2	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
91-20-3	Naphthalene	72.7	U	ug/kg dry	72.7	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
85-01-8	Phenanthrene	42.7	U	ug/kg dry	42.7	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
129-00-0	Pyrene	36.8	U	ug/kg dry	36.8	181	1	10/11/07 03:32	REM	EPA 8270C	7J09006
Surrogate: 2-Fluorobiphenyl (24-121%)		43 %									
Surrogate: Nitrobenzene-d5 (19-111%)		51 %									
Surrogate: Terphenyl-d14 (44-171%)		66 %									

## LABORATORY REPORT

Sample ID: 1169 JASMINE SIDE 02 - Lab Number: OQJ0057-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
NA	% Solids	93.4		%	0.100	0.100	1	10/03/07 18:50	RRP	EPA 160.3	7J03035
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
71-43-2	Benzene	0.128	U	ug/kg dry	0.128	0.349	1	10/03/07 19:57	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	0.148	U	ug/kg dry	0.148	0.349	1	10/03/07 19:57	JWT	EPA 8260B	7J03029

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

Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

**LABORATORY REPORT**  
Sample ID: 1169 JASMINE SIDE 02 - Lab Number: OQJ0057-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Volatile Organic Compounds by EPA Method 8260B - Cont.</b>											
91-20-3	Naphthalene	0.193	U	ug/kg dry	0.193	0.349	1	10/03/07 19:57	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.301	U	ug/kg dry	0.301	0.349	1	10/03/07 19:57	JWT	EPA 8260B	7J03029
1330-20-7	Xylenes, total	0.181	U	ug/kg dry	0.181	0.349	1	10/03/07 19:57	JWT	EPA 8260B	7J03029
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		123 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		98 %									
Surrogate: Dibromofluoromethane (55-145%)		102 %									
Surrogate: Toluene-d8 (80-117%)		93 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
83-32-9	Acenaphthene	79.2	U	ug/kg dry	79.2	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
208-96-8	Acenaphthylene	105	U	ug/kg dry	105	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
120-12-7	Anthracene	57.0	U	ug/kg dry	57.0	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
56-55-3	Benzo (a) anthracene	19.4	U	ug/kg dry	19.4	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
205-99-2	Benzo (b) fluoranthene	18.8	U	ug/kg dry	18.8	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
207-08-9	Benzo (k) fluoranthene	18.8	U	ug/kg dry	18.8	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
191-24-2	Benzo (g,h,i) perylene	18.5	U	ug/kg dry	18.5	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
50-32-8	Benzo (a) pyrene	22.0	U	ug/kg dry	22.0	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
90-12-0	1-Methylnaphthalene	89.7	U	ug/kg dry	89.7	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
218-01-9	Chrysene	21.4	U	ug/kg dry	21.4	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
53-70-3	Dibenz (a,h) anthracene	23.5	U	ug/kg dry	23.5	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
206-44-0	Fluoranthene	25.7	U	ug/kg dry	25.7	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
86-73-7	Fluorene	70.0	U	ug/kg dry	70.0	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
193-39-5	Indeno (1,2,3-cd) pyrene	23.1	U	ug/kg dry	23.1	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
91-57-6	2-Methylnaphthalene	76.2	U	ug/kg dry	76.2	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
91-20-3	Naphthalene	71.8	U	ug/kg dry	71.8	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
85-01-8	Phenanthrene	42.2	U	ug/kg dry	42.2	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
129-00-0	Pyrene	36.3	U	ug/kg dry	36.3	179	1	10/11/07 03:52	REM	EPA 8270C	7J09006
Surrogate: 2-Fluorobiphenyl (24-121%)		61 %									
Surrogate: Nitrobenzene-d5 (19-111%)		61 %									
Surrogate: Terphenyl-d14 (44-171%)		89 %									

**LABORATORY REPORT**  
Sample ID: 1169 JASMINE BOTTOM 03 - Lab Number: OQJ0057-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
NA	% Solids	92.3		%	0.100	0.100	1	10/03/07 18:50	RRP	EPA 160.3	7J03035
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
71-43-2	Benzene	0.122	U	ug/kg dry	0.122	0.332	1	10/03/07 20:13	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	0.160	I	ug/kg dry	0.141	0.332	1	10/03/07 20:13	JWT	EPA 8260B	7J03029
91-20-3	Naphthalene	0.778		ug/kg dry	0.184	0.332	1	10/03/07 20:13	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.287	U	ug/kg dry	0.287	0.332	1	10/03/07 20:13	JWT	EPA 8260B	7J03029
1330-20-7	Xylenes, total	0.173	U	ug/kg dry	0.173	0.332	1	10/03/07 20:13	JWT	EPA 8260B	7J03029
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		124 %									

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: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## LABORATORY REPORT

Sample ID: 1169 JASMINE BOTTOM 03 - Lab Number: OQJ0057-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Volatile Organic Compounds by EPA Method 8260B - Cont.</b>											
Surrogate: 4-Bromofluorobenzene (59-118%)		97 %									
Surrogate: Dibromofluoromethane (55-145%)		101 %									
Surrogate: Toluene-d8 (80-117%)		94 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
83-32-9	Acenaphthene	80.2	U	ug/kg dry	80.2	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
208-96-8	Acenaphthylene	106	U	ug/kg dry	106	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
120-12-7	Anthracene	57.7	U	ug/kg dry	57.7	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
56-55-3	Benzo (a) anthracene	19.6	U	ug/kg dry	19.6	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
205-99-2	Benzo (b) fluoranthene	19.1	U	ug/kg dry	19.1	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
207-08-9	Benzo (k) fluoranthene	19.1	U	ug/kg dry	19.1	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
191-24-2	Benzo (g,h,i) perylene	18.8	U	ug/kg dry	18.8	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
50-32-8	Benzo (a) pyrene	22.3	U	ug/kg dry	22.3	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
90-12-0	1-Methylnaphthalene	90.8	U	ug/kg dry	90.8	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
218-01-9	Chrysene	21.7	U	ug/kg dry	21.7	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
53-70-3	Dibenz (a,h) anthracene	23.8	U	ug/kg dry	23.8	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
206-44-0	Fluoranthene	26.0	U	ug/kg dry	26.0	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
86-73-7	Fluorene	70.8	U	ug/kg dry	70.8	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
193-39-5	Indeno (1,2,3-cd) pyrene	23.4	U	ug/kg dry	23.4	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
91-57-6	2-Methylnaphthalene	77.2	U	ug/kg dry	77.2	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
91-20-3	Naphthalene	72.7	U	ug/kg dry	72.7	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
85-01-8	Phenanthrene	42.7	U	ug/kg dry	42.7	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
129-00-0	Pyrene	36.8	U	ug/kg dry	36.8	181	1	10/11/07 04:12	REM	EPA 8270C	7J09006
Surrogate: 2-Fluorobiphenyl (24-121%)		60 %									
Surrogate: Nitrobenzene-d5 (19-111%)		59 %									
Surrogate: Terphenyl-d14 (44-171%)		89 %									

## LABORATORY REPORT

Sample ID: 1169 JASMINE SIDE 04 - Lab Number: OQJ0057-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
NA	% Solids	94.1		%	0.100	0.100	1	10/03/07 18:50	RRP	EPA 160.3	7J03035
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
71-43-2	Benzene	0.102	U	ug/kg dry	0.102	0.280	1	10/03/07 20:30	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	0.118	U	ug/kg dry	0.118	0.280	1	10/03/07 20:30	JWT	EPA 8260B	7J03029
91-20-3	Naphthalene	0.154	U	ug/kg dry	0.154	0.280	1	10/03/07 20:30	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.242	U	ug/kg dry	0.242	0.280	1	10/03/07 20:30	JWT	EPA 8260B	7J03029
1330-20-7	Xylenes, total	0.145	U	ug/kg dry	0.145	0.280	1	10/03/07 20:30	JWT	EPA 8260B	7J03029
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		125 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		95 %									
Surrogate: Dibromofluoromethane (55-145%)		101 %									
Surrogate: Toluene-d8 (80-117%)		93 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											

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: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## LABORATORY REPORT

Sample ID: 1169 JASMINE SIDE 04 - Lab Number: OQJ0057-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
83-32-9	Acenaphthene	78.6	U	ug/kg dry	78.6	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
208-96-8	Acenaphthylene	104	U	ug/kg dry	104	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
120-12-7	Anthracene	56.6	U	ug/kg dry	56.6	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
56-55-3	Benzo (a) anthracene	19.2	U	ug/kg dry	19.2	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
205-99-2	Benzo (b) fluoranthene	18.7	U	ug/kg dry	18.7	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
207-08-9	Benzo (k) fluoranthene	18.7	U	ug/kg dry	18.7	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
191-24-2	Benzo (g,h,i) perylene	18.4	U	ug/kg dry	18.4	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
50-32-8	Benzo (a) pyrene	21.8	U	ug/kg dry	21.8	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
90-12-0	1-Methylnaphthalene	89.1	U	ug/kg dry	89.1	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
218-01-9	Chrysene	21.2	U	ug/kg dry	21.2	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
53-70-3	Dibenz (a,h) anthracene	23.3	U	ug/kg dry	23.3	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
206-44-0	Fluoranthene	25.5	U	ug/kg dry	25.5	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
86-73-7	Fluorene	69.5	U	ug/kg dry	69.5	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
193-39-5	Indeno (1,2,3-cd) pyrene	23.0	U	ug/kg dry	23.0	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
91-57-6	2-Methylnaphthalene	75.7	U	ug/kg dry	75.7	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
91-20-3	Naphthalene	71.3	U	ug/kg dry	71.3	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
85-01-8	Phenanthrene	41.9	U	ug/kg dry	41.9	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
129-00-0	Pyrene	36.1	U	ug/kg dry	36.1	177	1	10/11/07 04:32	REM	EPA 8270C	7J09006
Surrogate: 2-Fluorobiphenyl (24-121%)		68 %									
Surrogate: Nitrobenzene-d5 (19-111%)		66 %									
Surrogate: Terphenyl-d14 (44-171%)		88 %									

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

Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## SAMPLE EXTRACTION DATA

Parameter	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Method
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQJ0057-01	30.0 g	1.0 mL	10/09/2007	PXN	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQJ0057-02	30.0 g	1.0 mL	10/09/2007	PXN	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQJ0057-03	30.0 g	1.0 mL	10/09/2007	PXN	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OQJ0057-04	30.0 g	1.0 mL	10/09/2007	PXN	EPA 3545 MS

Client: EPG, INC.  
PO BOX 1096  
MT PLEASANT, SC 29465  
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Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
<b>General Chemistry Parameters</b>					
% Solids	100		%	7J03035	7J03035-BLK1
<b>Volatile Organic Compounds by EPA Method 8260B</b>					
Benzene	0.183	U	ug/kg wet	7J03029	7J03029-BLK2
Benzene	0.183	U	ug/kg wet	7J03029	7J03029-BLK1
Ethylbenzene	0.212	U	ug/kg wet	7J03029	7J03029-BLK2
Ethylbenzene	0.212	U	ug/kg wet	7J03029	7J03029-BLK1
Naphthalene	0.276	U	ug/kg wet	7J03029	7J03029-BLK2
Naphthalene	0.276	U	ug/kg wet	7J03029	7J03029-BLK1
Toluene	0.630		ug/kg wet	7J03029	7J03029-BLK2
Toluene	0.660		ug/kg wet	7J03029	7J03029-BLK1
Xylenes, total	0.260	I	ug/kg wet	7J03029	7J03029-BLK2
Xylenes, total	0.330	I	ug/kg wet	7J03029	7J03029-BLK1
Surrogate: 1,2-Dichloroethane-d4	47.6		ug/kg wet	7J03029	7J03029-BLK2
Surrogate: 1,2-Dichloroethane-d4	45.8		ug/kg wet	7J03029	7J03029-BLK1
Surrogate: 4-Bromofluorobenzene	44.5		ug/kg wet	7J03029	7J03029-BLK2
Surrogate: 4-Bromofluorobenzene	47.2		ug/kg wet	7J03029	7J03029-BLK1
Surrogate: Dibromofluoromethane	45.9		ug/kg wet	7J03029	7J03029-BLK2
Surrogate: Dibromofluoromethane	48.4		ug/kg wet	7J03029	7J03029-BLK1
Surrogate: Toluene-d8	48.6		ug/kg wet	7J03029	7J03029-BLK1
Surrogate: Toluene-d8	46.2		ug/kg wet	7J03029	7J03029-BLK2
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>					
Acenaphthene	74.0	U	ug/kg wet	7J09006	7J09006-BLK1
Acenaphthylene	97.7	U	ug/kg wet	7J09006	7J09006-BLK1
Anthracene	53.2	U	ug/kg wet	7J09006	7J09006-BLK1
Benzo (a) anthracene	18.1	U	ug/kg wet	7J09006	7J09006-BLK1
Benzo (b) fluoranthene	17.6	U	ug/kg wet	7J09006	7J09006-BLK1
Benzo (k) fluoranthene	17.6	U	ug/kg wet	7J09006	7J09006-BLK1
Benzo (g,h,i) perylene	17.3	U	ug/kg wet	7J09006	7J09006-BLK1
Benzo (a) pyrene	20.6	U	ug/kg wet	7J09006	7J09006-BLK1
1-Methylnaphthalene	83.8	U	ug/kg wet	7J09006	7J09006-BLK1
Chrysene	20.0	U	ug/kg wet	7J09006	7J09006-BLK1
Dibenz (a,h) anthracene	21.9	U	ug/kg wet	7J09006	7J09006-BLK1
Fluoranthene	24.0	U	ug/kg wet	7J09006	7J09006-BLK1
Fluorene	65.4	U	ug/kg wet	7J09006	7J09006-BLK1
Indeno (1,2,3-cd) pyrene	21.6	U	ug/kg wet	7J09006	7J09006-BLK1
2-Methylnaphthalene	71.2	U	ug/kg wet	7J09006	7J09006-BLK1
Naphthalene	67.1	U	ug/kg wet	7J09006	7J09006-BLK1
Phenanthrene	39.4	U	ug/kg wet	7J09006	7J09006-BLK1
Pyrene	33.9	U	ug/kg wet	7J09006	7J09006-BLK1
Surrogate: 2-Fluorobiphenyl	1520		ug/kg wet	7J09006	7J09006-BLK1
Surrogate: Nitrobenzene-d5	1890		ug/kg wet	7J09006	7J09006-BLK1

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

Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>					
Surrogate: Terphenyl-d14	2620		ug/kg wet	7J09006	7J09006-BLK1

## PROJECT QUALITY CONTROL DATA Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
<b>General Chemistry Parameters</b>								
% Solids	65.0	63.8		%	2	20	7J03035	OQJ0048-01
<b>Volatile Organic Compounds by EPA Method 8260B</b>								
Benzene	<88.7	88.7	U	ug/kg dry		30	7J03029	OQI0662-03
Benzene	<11.5	11.5	U	ug/kg dry		30	7J03029	OQI0667-06
Ethylbenzene	249	275		ug/kg dry	10	30	7J03029	OQI0667-06
Ethylbenzene	2260	2230		ug/kg dry	1	30	7J03029	OQI0662-03
Naphthalene	6150	6820		ug/kg dry	10	30	7J03029	OQI0662-03
Naphthalene	12000	13200	L	ug/kg dry	10	30	7J03029	OQI0667-06
Toluene	37.0	27.1	U	ug/kg dry		30	7J03029	OQI0667-06
Toluene	276	271		ug/kg dry		30	7J03029	OQI0662-03
Xylenes, total	653	677		ug/kg dry	2	30	7J03029	OQI0667-06
Xylenes, total	940	906		ug/kg dry	3	30	7J03029	OQI0662-03
Surrogate: 1,2-Dichloroethane-d4		46.4		ug/kg dry	4	30	7J03029	OQI0667-06
Surrogate: 1,2-Dichloroethane-d4		49.1		ug/kg dry			7J03029	OQI0662-03
Surrogate: 4-Bromofluorobenzene		50.1		ug/kg dry			7J03029	OQI0667-06
Surrogate: 4-Bromofluorobenzene		48.2		ug/kg dry			7J03029	OQI0662-03
Surrogate: Dibromofluoromethane		46.6		ug/kg dry			7J03029	OQI0667-06
Surrogate: Dibromofluoromethane		44.3		ug/kg dry			7J03029	OQI0662-03
Surrogate: Toluene-d8		46.8		ug/kg dry			7J03029	OQI0667-06
Surrogate: Toluene-d8		45.4		ug/kg dry			7J03029	OQI0662-03



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

Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Q.C. Batch
<b>General Chemistry Parameters</b>							
% Solids	1000	1000		%	100	90 - 110	7J03035
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	50.0	56.0		ug/kg wet	112	84 - 113	7J03029
Benzene	50.0	52.1		ug/kg wet	104	84 - 113	7J03029
Ethylbenzene	50.0	55.2		ug/kg wet	110	85 - 124	7J03029
Ethylbenzene	50.0	53.9		ug/kg wet	108	85 - 124	7J03029
Naphthalene	50.0	49.0		ug/kg wet	98	90 - 130	7J03029
Naphthalene	50.0	45.5		ug/kg wet	91	90 - 130	7J03029
Toluene	50.0	52.3		ug/kg wet	105	82 - 112	7J03029
Toluene	50.0	56.1		ug/kg wet	112	82 - 112	7J03029
Xylenes, total	150	161		ug/kg wet	107	84 - 127	7J03029
Xylenes, total	150	163		ug/kg wet	108	84 - 127	7J03029
Surrogate: 1,2-Dichloroethane-d4	50.0	46.9		ug/kg wet	94	73 - 137	7J03029
Surrogate: 1,2-Dichloroethane-d4	50.0	50.6		ug/kg wet	101	73 - 137	7J03029
Surrogate: 4-Bromofluorobenzene	50.0	48.7		ug/kg wet	97	59 - 118	7J03029
Surrogate: 4-Bromofluorobenzene	50.0	53.2		ug/kg wet	106	59 - 118	7J03029
Surrogate: Dibromofluoromethane	50.0	46.9		ug/kg wet	94	55 - 145	7J03029
Surrogate: Dibromofluoromethane	50.0	48.6		ug/kg wet	97	55 - 145	7J03029
Surrogate: Toluene-d8	50.0	48.1		ug/kg wet	96	80 - 117	7J03029
Surrogate: Toluene-d8	50.0	51.7		ug/kg wet	103	80 - 117	7J03029
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>							
Acenaphthene	3330	2550		ug/kg wet	77	51 - 124	7J09006
Acenaphthylene	3330	2380		ug/kg wet	71	58 - 124	7J09006
Anthracene	3330	2440		ug/kg wet	73	61 - 122	7J09006
Benzo (a) anthracene	3330	2400		ug/kg wet	72	51 - 139	7J09006
Benzo (b) fluoranthene	3330	2470		ug/kg wet	74	57 - 129	7J09006
Benzo (k) fluoranthene	3330	2720		ug/kg wet	81	53 - 127	7J09006
Benzo (g,h,i) perylene	3330	2100		ug/kg wet	63	34 - 123	7J09006
Benzo (a) pyrene	3330	2440		ug/kg wet	73	65 - 109	7J09006
1-Methylnaphthalene	3330	2230		ug/kg wet	67	18 - 115	7J09006
Chrysene	3330	2360		ug/kg wet	71	55 - 130	7J09006
Dibenz (a,h) anthracene	3330	2220		ug/kg wet	67	48 - 125	7J09006
Fluoranthene	3330	3000		ug/kg wet	90	58 - 129	7J09006
Fluorene	3330	2500		ug/kg wet	75	61 - 128	7J09006
Indeno (1,2,3-cd) pyrene	3330	2250		ug/kg wet	68	44 - 126	7J09006
2-Methylnaphthalene	3330	2490		ug/kg wet	75	20 - 125	7J09006
Naphthalene	3330	2250		ug/kg wet	68	23 - 118	7J09006
Phenanthrene	3330	2520		ug/kg wet	75	61 - 120	7J09006
Pyrene	3330	2790		ug/kg wet	84	45 - 141	7J09006

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: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Q.C. Batch
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>							
Surrogate: 2-Fluorobiphenyl	3330	2280		ug/kg wet	68	24 - 121	7J09006
Surrogate: Nitrobenzene-d5	3330	2330		ug/kg wet	70	19 - 111	7J09006
Surrogate: Terphenyl-d14	3330	2630		ug/kg wet	79	44 - 171	7J09006

## PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked
<b>Volatile Organic Compounds by EPA Method 8260B</b>									
Benzene	0.823	38.5		ug/kg dry	48.3	78	18 - 126	7J03029	OQJ0048-01
Benzene	<0.0977	20.7		ug/kg dry	26.7	78	18 - 126	7J03029	OQI0667-02
Ethylbenzene	1.82	39.5		ug/kg dry	48.3	78	12 - 120	7J03029	OQJ0048-01
Ethylbenzene	<0.113	20.6		ug/kg dry	26.7	77	12 - 120	7J03029	OQI0667-02
Naphthalene	<0.148	17.6		ug/kg dry	26.7	66	10 - 125	7J03029	OQI0667-02
Naphthalene	<0.267	42.1		ug/kg dry	48.3	87	10 - 125	7J03029	OQJ0048-01
Toluene	<0.231	20.4		ug/kg dry	26.7	76	10 - 130	7J03029	OQI0667-02
Toluene	2.96	37.7		ug/kg dry	48.3	72	10 - 130	7J03029	OQJ0048-01
Xylenes, total	<0.139	62.0		ug/kg dry	80.1	77	10 - 126	7J03029	OQI0667-02
Xylenes, total	10.2	114		ug/kg dry	145	72	10 - 126	7J03029	OQJ0048-01
Surrogate: 1,2-Dichloroethane-d4		61.1		ug/kg dry	50.0	122	73 - 137	7J03029	OQI0667-02
Surrogate: 1,2-Dichloroethane-d4		53.7		ug/kg dry	50.0	107	73 - 137	7J03029	OQJ0048-01
Surrogate: 4-Bromofluorobenzene		42.9		ug/kg dry	50.0	86	59 - 118	7J03029	OQJ0048-01
Surrogate: 4-Bromofluorobenzene		52.1		ug/kg dry	50.0	104	59 - 118	7J03029	OQI0667-02
Surrogate: Dibromofluoromethane		30.3		ug/kg dry	50.0	61	55 - 145	7J03029	OQJ0048-01
Surrogate: Dibromofluoromethane		50.0		ug/kg dry	50.0	100	55 - 145	7J03029	OQI0667-02
Surrogate: Toluene-d8		47.7		ug/kg dry	50.0	95	80 - 117	7J03029	OQI0667-02
Surrogate: Toluene-d8		43.7		ug/kg dry	50.0	87	80 - 117	7J03029	OQJ0048-01

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

Work Order: OQJ0057  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 10/01/07  
Received: 10/03/07

## 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.
- L** Off-scale high, actual value is known to be greater than the value given.
- 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

ANALYTICAL TESTING CORPORATION

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

Client: EPG, INC.

Project: OQJ0057

Shipped By: Fed Ex

Tracking Number: 862643315559

Cooler Received On: 10/03/07 09:20

And Opened On (Date/time): 10/3 10:20

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 ☐

Discrepancy Comments:

Cooler Temperature When Opened: 5.80 Degrees Celsius

Temperature Blank Included: YES ☐ NO ☒

Packing Material: Bubblewrap ☒ NONE ☐ Other: plastic

Received on Ice: YES ☒ NO ☐ Other: ☐ Total # Of Containers: 8 # Vials 12

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? 16, 4 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, see comments:

Project Manager: Shali Brown

Corrective Actions Taken

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EPG

2411

\_\_\_\_\_

\_\_\_\_\_

J. MAHONEY

---

CHRIS ECHEVARRIA

Amor

0050057

LAUREL BAY

EP 2362

State

\_\_\_\_\_

\_\_\_\_\_

PO#:

PO#:

01
02
03
04

**Appendix C**  
**Laboratory Analytical Report - Groundwater**

# Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants				Laboratory ID: OG26003-010			
Description: BEALB1169TW01WG20130726				Matrix: Aqueous			
Date Sampled: 07/26/2013 1045							
Date Received: 07/26/2013							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	08/06/2013 0234	TAF		26561

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.49	J	0.50	0.25	0.027	ug/L	2
Ethylbenzene	100-41-4	8260B	1.9		0.50	0.25	0.17	ug/L	2
Naphthalene	91-20-3	8260B	20		0.50	0.25	0.12	ug/L	2
Toluene	108-88-3	8260B	0.17	J	0.50	0.25	0.17	ug/L	2
Xylenes (total)	1330-20-7	8260B	0.17	J	0.50	0.25	0.17	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-120
Toluene-d8		98	85-120
Bromofluorobenzene		111	75-120
Dibromofluoromethane		99	85-115

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time      Q = Surrogate failure  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      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

Client: AECOM - Resolution Consultants				Laboratory ID: OG26003-010			
Description: BEALB1169TW01WG20130726				Matrix: Aqueous			
Date Sampled: 07/26/2013 1045							
Date Received: 07/26/2013							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/30/2013 1717	RBH	07/29/2013 1434	26002

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	ND		0.22	0.11	0.089	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		0.22	0.11	0.095	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.22	0.11	0.10	ug/L	1
Chrysene	218-01-9	8270D	ND		0.22	0.11	0.059	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.22	0.11	0.063	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		60	50-110
Nitrobenzene-d5		59	40-110
Terphenyl-d14		71	50-135

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time      Q = Surrogate failure  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and  $\geq$  MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      S = MS/MSD failure

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

Level 1 Report v2.1



## **Appendix D**

### **Regulatory Correspondence**



C. Earl Hunter, Commissioner

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

April 20, 2009

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

Re: MCAS – Laurel Bay Housing – 1169 Jasmine  
**Site ID # 04160**  
Soil Sampling Results received March 24, 2009  
Beaufort County

Dear Mr. Ehde:

The Department has reviewed the referenced report. The submitted analytical results indicates that petroleum constituents are above established Risk-Based Screening Levels and additional investigative and/or remedial actions are warranted. The Department recommends that a groundwater monitoring well be installed to determine if there has been an impact to groundwater. Please submit the proposal to conduct the necessary assessment and/or remedial measures at this site no later than July 28, 2009.

Should you have any questions, please contact me at 803-896-4179 (office phone), 803-896-6245 (fax) or [cookejt@dhec.sc.gov](mailto:cookejt@dhec.sc.gov).

Sincerely,

Jan T. Cooke, Hydrogeologist  
AST Petroleum Restoration & Site Environmental Investigations Section  
Division of Site Assessment, Remediation & Revitalization  
Bureau of Land and Waste Management

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



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

August 6, 2015

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

RE: Approval Response to Comments and Concurrence with Final Initial Groundwater Investigation Report-July 2013  
Laurel Bay Military Housing Area Multiple Properties  
Dated June 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 10 stated addresses. For the remaining 25 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](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus  
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-July 2013  
 Specific Property Recommendations  
 Dated August 6, 2015

**Draft Final Initial Groundwater Investigation Report for (35 addresses/38 tanks)**

<b>Permanent Monitoring Well Investigation recommendation (10 addresses/11 tanks)</b>	
119 Banyan	156 Laurel Bay
128 Banyan	1033 Foxglove
132 Banyan	1055 Gardenia
135 Birch	1059 Gardenia
148 Laurel Bay	1168 Jasmine
<b>No Further Action recommendation (25 addresses/27 tanks):</b>	
115 Banyan	386 Acorn
116 Banyan	395 Acorn
120 Banyan	399 Acorn
124 Banyan	1021 Foxglove
125 Banyan	1027 Foxglove
136 Birch	1030 Foxglove
140 Laurel Bay	1032 Foxglove
144 Laurel Bay	1053 Gardenia
152 Laurel Bay	1058 Gardenia
160 Cypress	1061 Gardenia
263 Beech	1166 Jasmine
269 Birch	1169 Jasmine
295 Birch	