SUMMARY REPORT
145 GARDENIA DRIVE (FORMERLY 1061 GARDENIA DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and

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

JUNE 2021

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Prepared by:

CDM - AECOM Multimedia Joint Venture
10560 Arrowhead Drive, Suite 500
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Contract Number: N62470-14-D-9016
CTO WE52
JUNE 2021

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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
PPV	Public-Private Venture
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
UFP SAP	Uniform Federal Policy Sampling and Analysis Plan
USEPA	United States Environmental Protection Agency
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 145 Gardenia Drive (Formerly 1061 Gardenia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 145 Gardenia Drive (Formerly 1061 Gardenia Drive). The sampling activities at 145 Gardenia Drive (Formerly 1061 Gardenia Drive) comprised a soil investigation, IGWA sampling, and a soil gas investigation. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1061 Gardenia Drive* (MCAS Beaufort, 2008), in the *UST Assessment Report – 1061 Gardenia Drive* (MCAS Beaufort, 2009) and in the *UST Assessment Report – 1061 Gardenia Drive* (MCAS Beaufort, 2014). The UST Assessment Reports are 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* (PANDEY Environmental, LLC, 2008), in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015) and in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory reports that includes the pertinent IGWA analytical results for this site are presented in Appendix C. Details regarding the vapor intrusion investigation at this site are provided in the *Technical Memorandum – Soil Gas Sampling Results*

– *October 2014* (Resolution Consultants, 2015). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix D.

2.1 UST Removal and Soil Sampling

In 2007, 2009 and 2013, three 280 gallon heating oil USTs were removed at 145 Gardenia Drive (Formerly 1061 Gardenia Drive). Tank 1 was removed from underneath the adjacent to the concrete porch on August 6, 2007. Tank 2 was removed from the front grassed area on June 9, 2009. Tank 3 was removed from the front landscaped area, adjacent to the concrete porch on July 30, 2013. The former UST locations are indicated on the figures of the UST Assessment Reports (Appendix B). The USTs was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Reports (Appendix B), the depths to the bases of the USTs were 6'0" bgs (Tank 1), 5'3" bgs (Tank 2) and 4'4" bgs (Tank 3) and a single soil sample was collected for each from that depth. An additional sample was collected from the side of the excavation for Tank 1 at a depth of 4'4" bgs. The samples were collected from the fill port side of the former USTs to represent a worst case scenario 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 are presented in Table 1. A copy of the laboratory analytical data reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports include 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, 2 and 3) 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, 2 and 3) at 145 Gardenia Drive (Formerly 1061 Gardenia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In letters dated August 13, 2008, August 19, 2009 and July 1, 2015, SCDHEC requested IGWAs for 145 Gardenia Drive (Formerly 1061 Gardenia Drive) to

determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letters are provided in Appendix E.

2.3 Groundwater Sampling

In 2008, 2013 and 2015, three temporary monitoring wells were installed at 145 Gardenia Drive (Formerly 1061 Gardenia Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). 1061 Gardenia A was installed on July 28, 2008. TW01 was installed on July 24, 2013. TW03 was installed on November 20, 2015. 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 (Tanks 1, 2 and 3). The former UST locations are indicated on the figures of the UST Assessment Reports (Appendix B). Further details are provided in the *Initial Investigation of Ground Water at Leaking Heating Oil UST Sites* (PANDEY Environmental, LLC, 2008), in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015) and in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring wells. Following well installation during the 2008 temporary well installation event, a groundwater sample was collected using screen point sampling methods. Following well installation and development during the 2013 and 2015 temporary well installation events, groundwater samples were collected using low-flow methods. All samples were 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 *Investigation of Ground Water at Leaking Heating Oil UST Sites* (PANDEY Environmental, LLC, 2008), in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015) and in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

2.4 Groundwater Analytical Results

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

The groundwater results collected from 145 Gardenia Drive (Formerly 1061 Gardenia Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former USTs (Tanks 1, 2 and 3) at concentrations that present a potential risk to human health and the environment.

2.5 Soil Gas Sampling

On April 27, 2017, a temporary near-slab vapor pin was installed at 145 Gardenia Drive (Formerly 1061 Gardenia Drive) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media, Revision 4* (Resolution Consultants, 2017). The vapor pin was placed near the house slab, underneath the rear concrete patio. The near slab vapor pin was installed to investigate potential for vapor intrusion downgradient from adjacent 145 Gardenia Drive (Formerly 1061 Gardenia Drive). Further details are provided in the *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018* (Resolution Consultants, 2018).

The sampling strategy for this phase of the investigation required a one-time sampling event of the vapor pin. The near-slab vapor pin at 145 Gardenia Drive (Formerly 1061 Gardenia Drive) was sampled on April 27, 2017. A soil gas sample was collected and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of soil gas sampling, the temporary vapor pin was abandoned in accordance with the *UFP SAP for Vapor Media, Revision 4* (Resolution Consultants, 2017). Field forms are provided in the *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018* (Resolution Consultants, 2018).

2.6 Soil Gas Analytical Results

A summary of the laboratory analytical results and United States Environmental Protection Agency (USEPA) VISLs is presented in Table 3. A copy of the laboratory analytical data report is included in Appendix D.

The soil gas results collected from 145 Gardenia Drive (Formerly 1061 Gardenia Drive) were below the USEPA VISLs, which indicated that near slab soil gas was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 145 Gardenia Drive (Formerly 1061 Gardenia Drive). The NFA determination for groundwater was obtained in letters dated December 18, 2008, August 6, 2015 and June 8, 2016. Based on the analytical results for soil gas, it was determined that there was not a vapor intrusion concern at this property and a recommendation was made for no additional vapor intrusion assessment activities. SCDHEC approved the no further vapor intrusion investigation recommendation for 145 Gardenia Drive (Formerly 1061 Gardenia Drive) in a letter dated August 29, 2018. SCDHEC's letters are provided in Appendix E.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2008. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1061 Gardenia Drive, Laurel Bay Military Housing Area*, January 2008.

Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1061 Gardenia Drive, Laurel Bay Military Housing Area*, August 2009.

Marine Corps Air Station Beaufort, 2014. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1061 Gardenia Drive, Laurel Bay Military Housing Area*, March 2014.

PANDEY Environmental, LLC, 2008. *Investigation of Ground Water at Leaking Heating Oil UST Sites for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina,* November 2008.

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.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay*

Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, April 2016.

Resolution Consultants, 2017. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, Revision 4, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, May 2017.

Resolution Consultants, 2018. *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, July 2018.

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.

United States Environmental Protection Agency, 2018. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator,* May 2018.

Tables

Table 1
Laboratory Analytical Results - Soil
145 Gardenia Drive (Formerly 1061 Gardenia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Samples Collected 08/17/07, 06/09/09 and 07/30/13			
		1061 Gardenia - 01 Bottom 08/17/07	1061 Gardenia - 02 Side 08/17/07	1061 Gardenia 06/09/09	1061-1 Gardenia 07/30/13
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)					
Benzene	0.007	**0.000365**	ND	ND	**0.0107**
Ethylbenzene	1.15	**0.000365**	ND	**0.0160**	**3.29**
Naphthalene	0.036	**0.00518**	ND	**0.760**	**24.2**
Toluene	1.45	**0.000813**	ND	ND	ND
Xylenes, Total	14.5	**0.00125**	ND	ND	**3.85**
Semivolatile Organic Compounds Analyzed by EPA Method 8270 (mg/kg)					
Benzo(a)anthracene	0.066	**0.139**	ND	ND	ND
Benzo(b)fluoranthene	0.066	**0.0963**	ND	ND	ND
Benzo(k)fluoranthene	0.066	ND	ND	ND	ND
Chrysene	0.066	**0.102**	ND	ND	ND
Dibenz(a,h)anthracene	0.066	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 (SCDHEC, May 2001).
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
145 Gardenia Drive (Formerly 1061 Gardenia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Site-Specific Groundwater VISLs (µg/L) [2]	Results Samples Collected 07/28/08, 07/24/13 and 11/20/15		
			1061 Gardenia A 07/28/08	TW01 07/24/13	TW03 11/20/15
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)					
Benzene	5	16.24	ND	**0.13**	ND
Ethylbenzene	700	45.95	ND	**3.0**	ND
Naphthalene	25	29.33	ND	**9.0**	**0.88**
Toluene	1000	105,445	ND	ND	ND
Xylenes, Total	10,000	2,133	ND	**0.21**	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)					
Benzo(a)anthracene	10	NA	ND	ND	ND
Benzo(b)fluoranthene	10	NA	ND	ND	ND
Benzo(k)fluoranthene	10	NA	ND	ND	ND
Chrysene	10	NA	ND	ND	ND
Dibenz(a,h)anthracene	10	NA	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 (SCDHEC, May 2001).

[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

Table 3
Laboratory Analytical Results - Vapor
145 Gardenia Drive (Formerly 1061 Gardenia Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	USEPA VISL [(1)]	Soil Gas Results Sample Collected 04/27/17
Volatile Organic Compounds Analyzed by USEPA Method TO-15 (µg/m^3)		
Benzene	12	**6.5**
Toluene	17000	**8.5**
Ethylbenzene	37	**1.8**
m,p-Xylenes	350	**5.1**
o-Xylene	350	**1.9**
Naphthalene	2.8	**1.0**

Notes:

[(1)] United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (May 2018).

VISLs are based on a residual exposure scenario and a target risk level of $1x10^{-6}$ and a hazard quotient of 0.1.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the residential VISL.

The vapor laboratory report is provided in Appendix D.

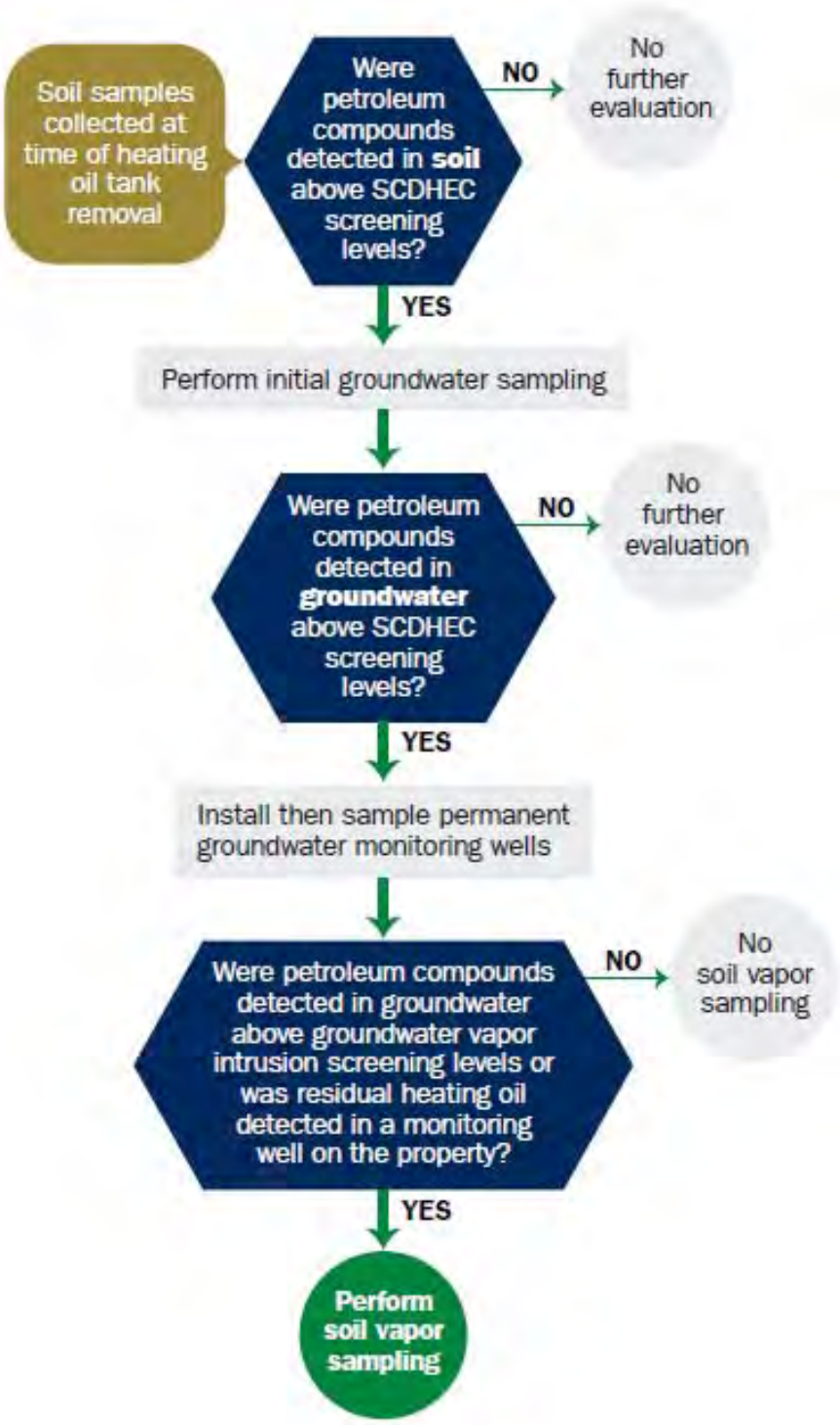
µg/m^3 - micrograms per cubic meter

USEPA - United States Environmental Protection Agency

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 Reports

CDM - AECOM
Multimedia Joint Venture

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)

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

1061 Gardenia
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					
B. Capacity..(ex. 1k, 2k)..... (APPROX)	350g.					
C. Age.....						
D. Construction Material..(ex. Steel, FRP).....	steel					
E. Month/Year of Last Use.....						
F. Depth (ft.) To Base of Tank.....	72"					
G. Spill Prevention Equipment Y/N.....	N					
H. Overfill Prevention Equipment Y/N.....	N					
I. Method of Closure (Removed/Filled).....	Removed					
J. Date Tanks Removed/Filled.....	8-6-7					
K. Visible Corrosion or Pitting Y/N.....	N					
L. Visible Holes Y/N.....	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 was Filled w/ oil & WATER

VI. PIPI ; INFORMATION

	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.....	Electric Pump					
E. Was Piping Removed from the Ground? Y/N	N					
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.

VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

VIII. SITE CON TIONS

	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.		X	
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.)		X	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		X	
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:		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		X	

IX. SAM E 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 #
1	BOTTOM	S	SAND	72'	8-6-7	M. JONES	ND
2	SIDE	S	SAND	52'	8-6-7	M. JONES	ND
3							
4							
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.		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.		✓
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 N/A

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

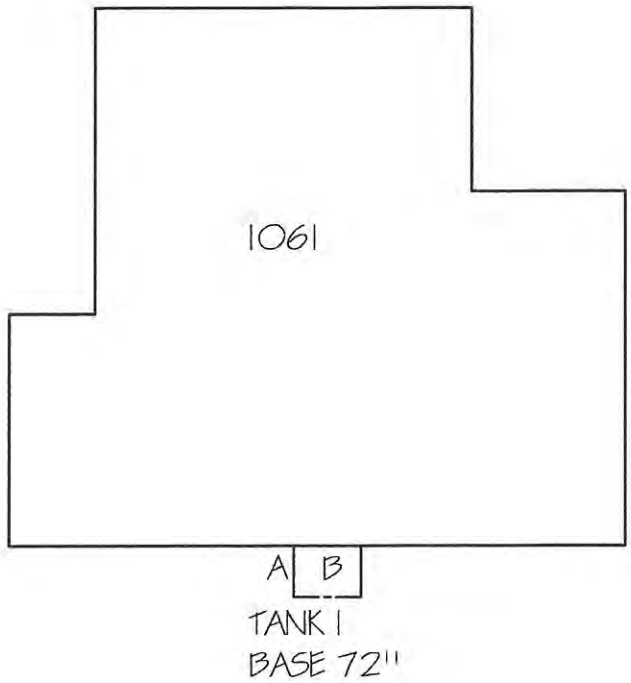
CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

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				



GARDENIA DRIVE

N

TANK 1 EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 52"
B-SOIL TEST BOTTOM SAMPLE @ 72"

CUSTOMER: BEAUFORT MILITARY COMPLEX FAMILY HOUSING	SCALE: 1/16"=1'-0"	EPG INC.
SITE ADDRESS: 1061 GARDENIA DRIVE	SUPPLIER: EPG INC.	P.O. BOX 1096
	DATE: 9/22/2007	MOUNT PLEASANT, SC 29465-1096


08.17.2007 10:31
1061 GARDENIA


A22551
Utility
Excavator
Control
KOMATSU
KOMATSU
08.17.2007 10:31
1061 GARDENIA

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)

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

Work Order: OQH0569
Project: LAUREL BAY
Project Number: EP-2362

Sampled: 08/16/07-08/18/07
Received: 08/23/07

LABORATORY REPORT

Sample ID: 1057 GARDENIA SIDE-02 (TANK 1) - Lab Number: OQH0569-02 - 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**	**911**	RL2	ug/kg dry	20.6	37.2	100	08/29/07 17:25	JWT	EPA 8260B	7H27020
108-88-3	Toluene	32.1	RL2,U	ug/kg dry	32.1	37.2	100	08/29/07 17:25	JWT	EPA 8260B	7H27020
1330-20-7	**Xylenes, total**	**46.9**	RL2	ug/kg dry	19.3	37.2	100	08/29/07 17:25	JWT	EPA 8260B	7H27020
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*97 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*105 %*									
Surrogate: Dibromofluoromethane (55-145%)		*99 %*									
Surrogate: Toluene-d8 (80-117%)		*98 %*									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	96.7	U	ug/kg dry	96.7	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
208-96-8	Acenaphthylene	128	U	ug/kg dry	128	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
120-12-7	**Anthracene**	**479**		ug/kg dry	69.6	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
56-55-3	**Benzo (a) anthracene**	**908**		ug/kg dry	23.6	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
205-99-2	**Benzo (b) fluoranthene**	**816**		ug/kg dry	23.0	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
207-08-9	**Benzo (k) fluoranthene**	**183**	I	ug/kg dry	23.0	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
191-24-2	Benzo (g,h,i) perylene	22.6	U	ug/kg dry	22.6	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
50-32-8	**Benzo (a) pyrene**	**396**		ug/kg dry	26.9	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
90-12-0	1-Methylnaphthalene	110	U	ug/kg dry	110	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
218-01-9	**Chrysene**	**560**		ug/kg dry	26.1	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
53-70-3	Dibenz (a,h) anthracene	28.7	U	ug/kg dry	28.7	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
206-44-0	Fluoranthene	31.4	U	ug/kg dry	31.4	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
86-73-7	Fluorene	85.4	U	ug/kg dry	85.4	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
193-39-5	**Indeno (1,2,3-cd) pyrene**	**79.3**	I	ug/kg dry	28.3	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
91-57-6	2-Methylnaphthalene	93.1	U	ug/kg dry	93.1	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
91-20-3	Naphthalene	87.6	U	ug/kg dry	87.6	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
85-01-8	**Phenanthrene**	**512**		ug/kg dry	51.5	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
129-00-0	**Pyrene**	**1620**		ug/kg dry	44.3	218	1	09/01/07 03:50	JLS	EPA 8270C	7H27033
Surrogate: 2-Fluorobiphenyl (24-121%)		*78 %*									
Surrogate: Nitrobenzene-d5 (19-111%)		*52 %*									
Surrogate: Terphenyl-d14 (44-171%)		*118 %*									

LABORATORY REPORT

Sample ID: 1061 GARDENIA-BOTTOM 01 - Lab Number: OQH0569-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	**74.8**		%.	0.100	0.100	1	08/24/07 16:05	RRP	EPA 160.3	7H24049
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	**Benzene**	**0.365**	I	ug/kg dry	0.139	0.380	1	08/28/07 17:21	JWT	EPA 8260B	7H27020
100-41-4	**Ethylbenzene**	**0.365**	I	ug/kg dry	0.161	0.380	1	08/28/07 17:21	JWT	EPA 8260B	7H27020
91-20-3	**Naphthalene**	**5.18**		ug/kg dry	0.210	0.380	1	08/28/07 17:21	JWT	EPA 8260B	7H27020
108-88-3	**Toluene**	**0.813**		ug/kg dry	0.328	0.380	1	08/28/07 17:21	JWT	EPA 8260B	7H27020
1330-20-7	**Xylenes, total**	**1.25**		ug/kg dry	0.197	0.380	1	08/28/07 17:21	JWT	EPA 8260B	7H27020
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*118 %*									

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

Work Order: OQH0569
Project: LAUREL BAY
Project Number: EP-2362

Sampled: 08/16/07-08/18/07
Received: 08/23/07

LABORATORY REPORT
Sample ID: 1061 GARDENIA-BOTTOM 01 - Lab Number: OQH0569-03 - 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%)		*57 %*	J1								
Surrogate: Dibromofluoromethane (55-145%)		*112 %*									
Surrogate: Toluene-d8 (80-117%)		*82 %*									
General Chemistry Parameters											
Solids	**% Dry Solids**	**74.8**	SPS	%	0.500	0.500	1	08/22/07 16:45	AEB	SW-846	7085830
Polyaromatic Hydrocarbons by EPA 8270C											
83-32-9	Acenaphthene	0.0466	U	mg/kg dry	0.0466	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
208-96-8	Acenaphthylene	0.0570	U	mg/kg dry	0.0570	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
120-12-7	**Anthracene**	**0.0786**	I	mg/kg dry	0.0518	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
56-55-3	**Benzo (a) anthracene**	**0.139**		mg/kg dry	0.0479	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
50-32-8	Benzo (a) pyrene	0.0518	U	mg/kg dry	0.0518	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
205-99-2	**Benzo (b) fluoranthene**	**0.0963**		mg/kg dry	0.0492	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
191-24-2	Benzo (g,h,i) perylene	0.0350	U	mg/kg dry	0.0350	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
207-08-9	Benzo (k) fluoranthene	0.0596	U	mg/kg dry	0.0596	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
218-01-9	**Chrysene**	**0.102**		mg/kg dry	0.0505	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
53-70-3	Dibenz (a,h) anthracene	0.0337	U	mg/kg dry	0.0337	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
206-44-0	**Fluoranthene**	**0.623**		mg/kg dry	0.0544	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
86-73-7	**Fluorene**	**0.0945**		mg/kg dry	0.0557	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
193-39-5	Indeno (1,2,3-cd) pyrene	0.0440	U	mg/kg dry	0.0440	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
91-20-3	Naphthalene	0.0518	U	mg/kg dry	0.0518	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
85-01-8	**Phenanthrene**	**0.0907**		mg/kg dry	0.0518	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
129-00-0	**Pyrene**	**0.532**		mg/kg dry	0.0609	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
90-12-0	1-Methylnaphthalene	0.0466	U	mg/kg dry	0.0466	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
91-57-6	**2-Methylnaphthalene**	**0.0997**		mg/kg dry	0.0466	0.0868	1	08/31/07 02:58	RLB	SW846 8270C	7085613
Surrogate: Terphenyl-d14 (49-123%)		*74 %*									
Surrogate: 2-Fluorobiphenyl (30-93%)		*67 %*									
Surrogate: Nitrobenzene-d5 (34-87%)		*80 %*									

LABORATORY REPORT
Sample ID: 1061 GARDENIA-SIDE-02 - Lab Number: OQH0569-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	**% Solids**	**83.0**		%.	0.100	0.100	1	08/24/07 16:05	RRP	EPA 160.3	7H24049
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.106	U	ug/kg dry	0.106	0.290	1	08/28/07 17:01	JWT	EPA 8260B	7H27020
100-41-4	Ethylbenzene	0.123	U	ug/kg dry	0.123	0.290	1	08/28/07 17:01	JWT	EPA 8260B	7H27020
91-20-3	Naphthalene	0.160	U	ug/kg dry	0.160	0.290	1	08/28/07 17:01	JWT	EPA 8260B	7H27020
108-88-3	Toluene	0.251	U	ug/kg dry	0.251	0.290	1	08/28/07 17:01	JWT	EPA 8260B	7H27020
1330-20-7	Xylenes, total	0.151	U	ug/kg dry	0.151	0.290	1	08/28/07 17:01	JWT	EPA 8260B	7H27020
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*119 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*98 %*									
Surrogate: Dibromofluoromethane (55-145%)		*106 %*									

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

Work Order: OQH0569
Project: LAUREL BAY
Project Number: EP-2362

Sampled: 08/16/07-08/18/07
Received: 08/23/07

LABORATORY REPORT
Sample ID: 1061 GARDENIA-SIDE-02 - Lab Number: OQH0569-04 - 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: Toluene-d8 (80-117%)		*100 %*									
General Chemistry Parameters											
Solids	**% Dry Solids**	**83.0**	SPS	%	0.500	0.500	1	08/22/07 16:45	AEB	SW-846	7085830
Polyaromatic Hydrocarbons by EPA 8270C											
83-32-9	Acenaphthene	0.0426	U	mg/kg dry	0.0426	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
208-96-8	Acenaphthylene	0.0521	U	mg/kg dry	0.0521	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
120-12-7	Anthracene	0.0473	U	mg/kg dry	0.0473	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
56-55-3	Benzo (a) anthracene	0.0438	U	mg/kg dry	0.0438	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
50-32-8	Benzo (a) pyrene	0.0473	U	mg/kg dry	0.0473	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
205-99-2	Benzo (b) fluoranthene	0.0450	U	mg/kg dry	0.0450	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
191-24-2	Benzo (g,h,i) perylene	0.0319	U	mg/kg dry	0.0319	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
207-08-9	Benzo (k) fluoranthene	0.0544	U	mg/kg dry	0.0544	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
218-01-9	Chrysene	0.0461	U	mg/kg dry	0.0461	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
53-70-3	Dibenz (a,h) anthracene	0.0308	U	mg/kg dry	0.0308	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
206-44-0	Fluoranthene	0.0497	U	mg/kg dry	0.0497	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
86-73-7	Fluorene	0.0509	U	mg/kg dry	0.0509	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
193-39-5	Indeno (1,2,3-cd) pyrene	0.0402	U	mg/kg dry	0.0402	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
91-20-3	Naphthalene	0.0473	U	mg/kg dry	0.0473	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
85-01-8	Phenanthrene	0.0473	U	mg/kg dry	0.0473	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
129-00-0	Pyrene	0.0556	U	mg/kg dry	0.0556	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
90-12-0	1-Methylnaphthalene	0.0426	U	mg/kg dry	0.0426	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
91-57-6	2-Methylnaphthalene	0.0426	U	mg/kg dry	0.0426	0.0793	1	08/31/07 03:22	RLB	SW846 8270C	7085613
Surrogate: Terphenyl-d14 (49-123%)		*79 %*									
Surrogate: 2-Fluorobiphenyl (30-93%)		*68 %*									
Surrogate: Nitrobenzene-d5 (34-87%)		*81 %*									

LABORATORY REPORT
Sample ID: 1065 GARDENIA-BOTTOM-01 - Lab Number: OQH0569-05 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
N/A	**% Solids**	**82.2**		%.	0.100	0.100	1	08/24/07 16:05	RRP	EPA 160.3	7H24049
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	5.22	RL2,U	ug/kg dry	5.22	14.3	50	08/29/07 17:07	JWT	EPA 8260B	7H27020
100-41-4	Ethylbenzene	6.04	RL2,U	ug/kg dry	6.04	14.3	50	08/29/07 17:07	JWT	EPA 8260B	7H27020
91-20-3	**Naphthalene**	**313**	RL2	ug/kg dry	7.88	14.3	50	08/29/07 17:07	JWT	EPA 8260B	7H27020
108-88-3	Toluene	12.3	RL2,U	ug/kg dry	12.3	14.3	50	08/29/07 17:07	JWT	EPA 8260B	7H27020
1330-20-7	Xylenes, total	7.41	RL2,U	ug/kg dry	7.41	14.3	50	08/29/07 17:07	JWT	EPA 8260B	7H27020
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		*94 %*									
Surrogate: 4-Bromofluorobenzene (59-118%)		*105 %*									
Surrogate: Dibromofluoromethane (55-145%)		*96 %*									
Surrogate: Toluene-d8 (80-117%)		*97 %*									
General Chemistry Parameters											

OQH0567

Page 1 of 2

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 #: ____
Address: ____
City/State/Zip Code: ____
Project Manager: ____
Telephone Number: ____ Fax: ____
Sampler Name: (Print Name) MACK JONES
Sampler Signature: ____

Project Name: LAUREL BAY
Project #: EP-2362
Site/Location ID: ____ State: ____
Report To: John Mahoney
Invoice To: ____
Quote #: ____ PO#: ____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: ____
Fax Results: Y N

Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other
Preservation & # of Containers: HNO_3, HCl, NaOH, H_2SO_4, Methanol, None, Other (Specify)
Analyze For: BTEX-NAPTH 8260, PAH 8270

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other	BTEX-NAPTH 8260	PAH 8270	REMARKS
1057 GARDENIA BOTTOM-01	8-16-7	8:30	G							1	2	2	X	X	-01
1057 GARDENIA SIDE-02	8-16-7	8:30	G							1	2	2	X	X	-02
1061 GARDENIA-BOTTOM-01	8-17-7	8:30	G							1	2	2	X	X	-03
1061 GARDENIA-SIDE-02	8-17-7	8:30	G							1	2	2	X	X	-04
1065 GARDENIA-BOTTOM-01	8-17-07	10:00	G							1	2	2	X	X	-05
1065 GARDENIA-SIDE-02	8-17-07	10:00	G							1	2	2	X	X	-06
1141 IRIS - BOTTOM-01	8-18-7	9:00	G							1	2	2	X	X	-07
1141 IRIS - SIDE-02	8-18-7	9:00	G							1	2	2	X	X	-08
1048 - GARDENIA BOTTOM-01	8-18-7	1:00	G							1	2	2	X	X	-09
1048 - GARDEN - SIDE-02	8-18-7	1:00	G							1	2	2	X	X	-10

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

Special Instructions:
1057 GARDENIA HAD (2) ~~bottles~~ for SAMPLES

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp: 5.4
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
8626 4331 4975
Method of Shipment: FedEx TOTA Orlando

	Date	Time		Date	Time
Relinquished By: John Mahoney	8/22/07	1215	Received By:	8/22/07	1215
Relinquished By:	8/22/07	1730	Received By:	8/23/07	0930
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

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 #: _____
Address: _____
City/State/Zip Code: _____
Project Manager: _____
Telephone Number: _____ Fax: _____
Sampler Name: (Print Name) Mack Jones
Sampler Signature: _____

Project Name: Laurel Bay
Project #: EP.2362
Site/Location ID: _____ State: _____
Report To: John Mahoney
Invoice To: _____
Quote #: _____ PO#: _____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N

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	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: BTEX+Naphth 8260	PAH 8270	QC Deliverables	REMARKS
Tank 2 1057 Gardenia Bottom	8.16.07	2:30	G							1	2	2	X	X		-11
Tank 2 1057 Gardenia Side 02	8.16.07	2:30	G							1	2	2	X	X		-12

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

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp: 5.4
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
Method of Shipment: Fed Ex 8676 4336 4975 To TA-Orlando

	Date	Time		Date	Time
Relinquished By: John Mahoney	8/22/07	1215	Received By:	8.22.07	1215
Relinquished By:	8/22/07	1730	Received By:	8/23/07	0930
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

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) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code

843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier

1061 Gardenia St., Laurel Bay Military Housing Area
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ at Permit ID Number _____ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES**____ **NO**_____ (check one)

If you answered **YES** to the above question, please complete the following information:

My policy provider is:_____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

IV. REQUEST FOR SUPERB FUNDING

I **DO** / DO **NOT** wish to participate in the SUPERB Program. (Circle one.)

V. CERTIFICATION (To be signed by the UST owner)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____
Name (Type or print.)

_____
Signature

To be completed by Notary Public:

Sworn before me this _____ day of_____, 20____

_____
(Name)

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

VI. UST INFORMATION

	1061 Gardenia				
A. Product...(ex. Gas, Kerosene).....	Heating oil				
B. Capacity..(ex. 1k, 2k).....	280 gal				
C. Age.....	Late 1950s				
D. Construction Material..(ex. Steel, FRP).....	Steel				
E. Month/Year of Last Use.....	Mid 1980s				
F. Depth (ft.) To Base of Tank.....	5'3"				
G. Spill Prevention Equipment Y/N.....	No				
H. Overfill Prevention Equipment Y/N.....	No				
I. Method of Closure Removed/Filled.....	Removed				
J. Date Tanks Removed/Filled.....	6/9/09				
K. Visible Corrosion or Pitting Y/N.....	Yes				
L. Visible Holes Y/N.....	Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1061Gardenia was removed from the ground and disposed of at a Subtitle "D" landfill. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1061Gardenia had been previously filled with sand by others.

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

VII. PIPING INFORMATION

1061 Gardenia				
Steel & Copper				
N/A				
N/A				
Suction				
*Yes				
*Unknown				
*Unknown				
Late 1950s				

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.....

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

*The copper supply & return piping and the steel vent pipe were previously removed by others.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1061 Gardenia	Excav at fill end	Soil	Sandy	5'3"	6/9/09 1000 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

XII. RECEPTORS

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

XIII. SITE MAP

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

(Attach Site Map Here)

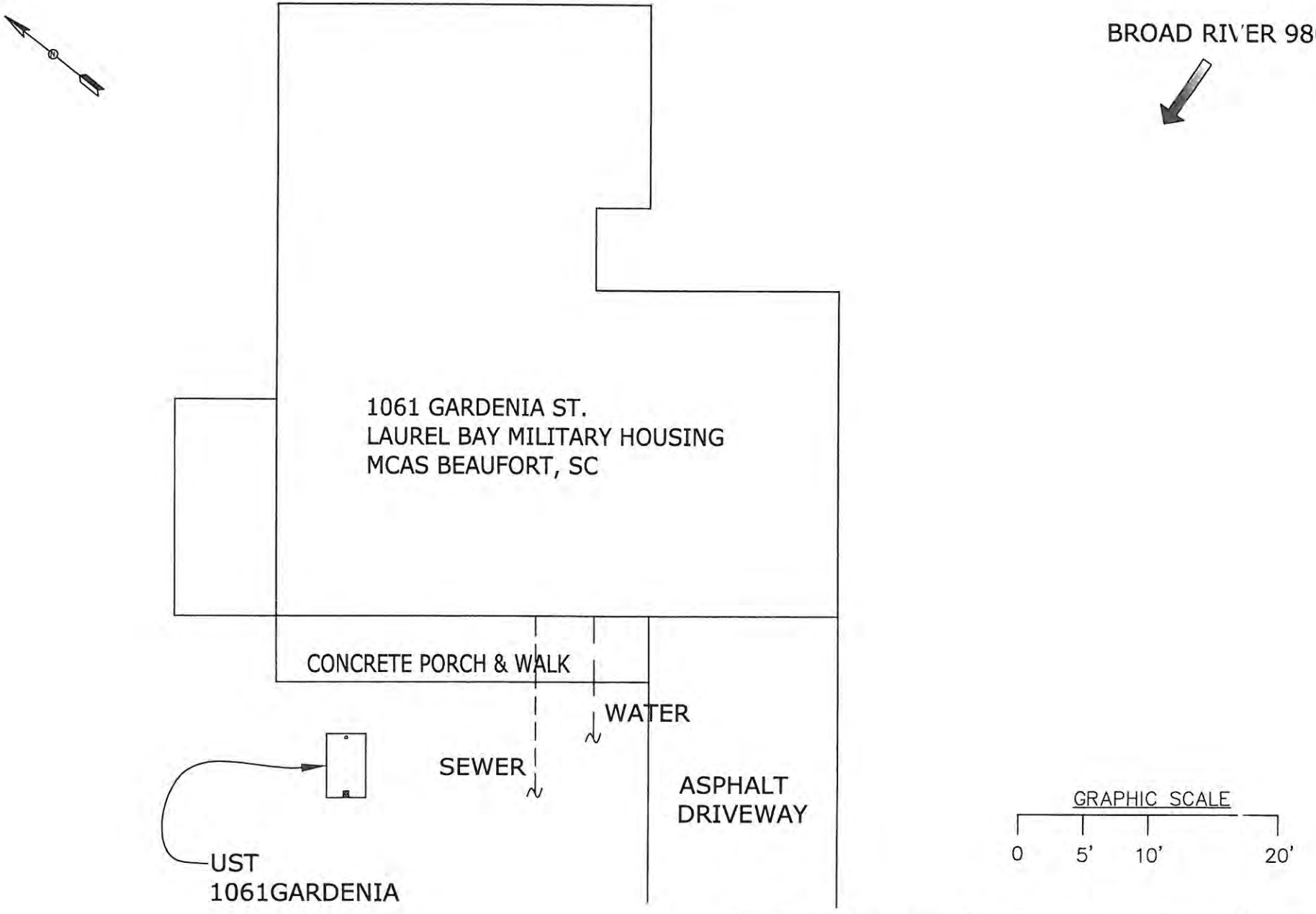
SBG-EEG, Inc.
Small Business Group, Inc.
10179 Hwy 78
Ladson, SC 29456

Ph. (843) 879-0400

Drawn By: L. DiAsio

Dwg Date: July 2009

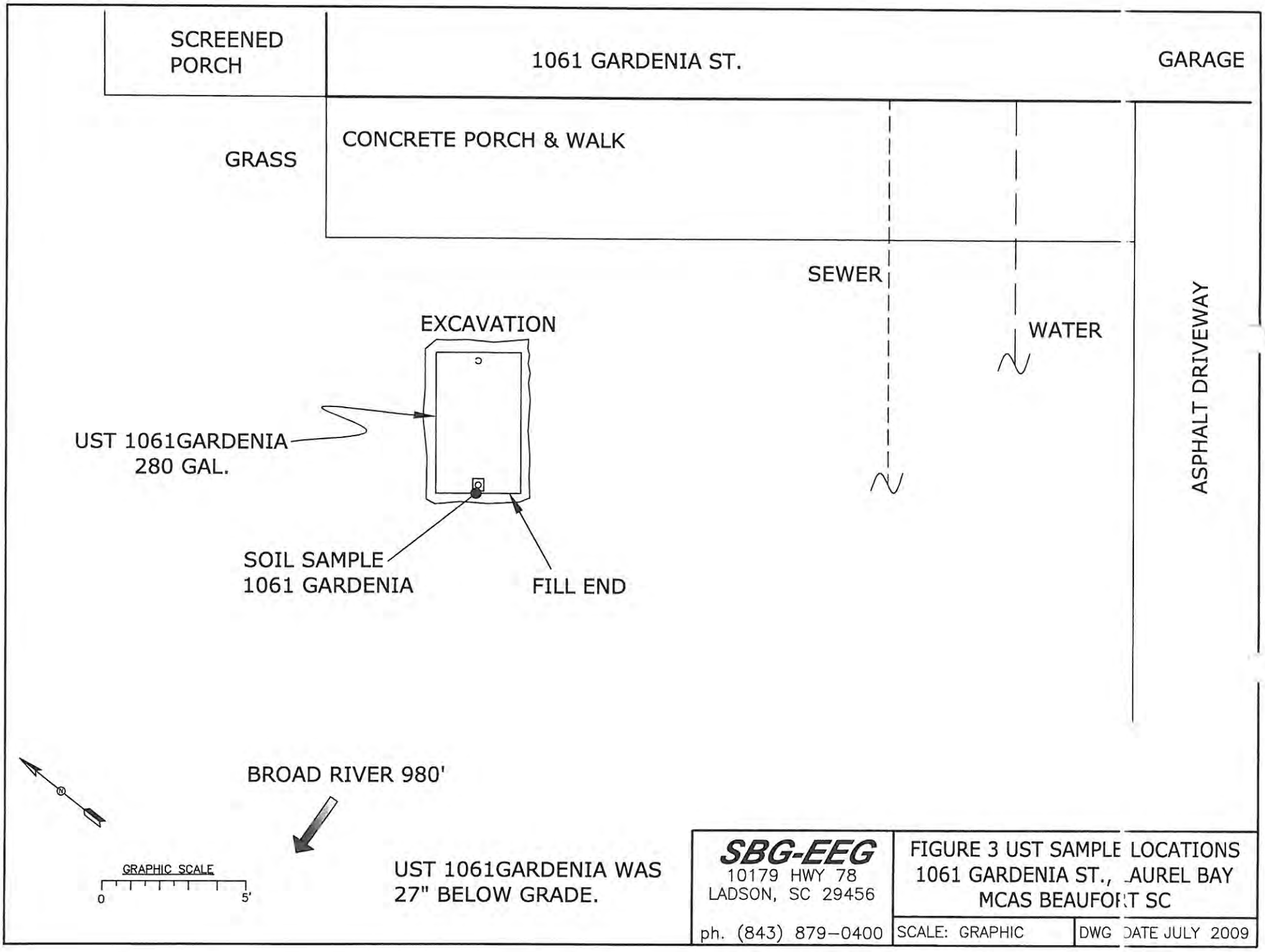
FIGURE 1: LOCATION MAP
1061 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 2 SITE MAP
1061 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE JULY 2009



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 3 UST SAMPLE LOCATIONS
1061 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE JULY 2009

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	1061Gardenia						
Benzene	ND						
Toluene	ND						
Ethylbenzene	0.0160 mg/kg						
Xylenes	ND						
Naphthalene	0.760 mg/kg						
Benzo (a) anthracene	ND						
Benzo (b) fluoranthene	ND						
Benzo (k) fluoranthene	ND						
Chrysene	ND						
Dibenz (a, h) anthracene	ND						
TPH (EPA 3550)							

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

CoC	RBSL (µg/l)	MW-1	MW-2	MW -3	MW -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	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

June 26, 2009 1:41:44PM

Client: EEG - Small Business Group, Inc. (2449)
10179 Highway 78
Ladson, SC 29456
Attn: Tom McElwee

Work Order: NSF1280
Project Name: Laurel Bay Housing Project
Project Nbr: [none]
P/O Nbr: 0829
Date Received: 06/12/09

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

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

South Carolina Certification Number: 84009001

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.
Estimated uncertainty is available upon request.
This report has been electronically signed.
Report Approved By:

Ken A. Hayes

Senior Project Manager

[illegible]
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: [illegible]
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 06/12/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSF1280-01 (1061 Gardenia - Soil) Sampled: 06/09/09 10:00								
General Chemistry Parameters								
% Dry Solids	**64.4**		%	0.500	1	06/24/09 09:09	SW-846	9063707
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Ethylbenzene	**0.0160**		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Naphthalene	**0.760**		mg/kg dry	0.322	50	06/18/09 20:36	SW846 8260B	9063105
Toluene	ND		mg/kg dry	0.00225	1	06/16/09 16:53	SW846 8260B	9062143
Xylenes, total	ND		mg/kg dry	0.00562	1	06/16/09 16:53	SW846 8260B	9062143
Surr: 1,2-Dichloroethane-d4 (67-138%)	*87 %*					*06/16/09 16:53*	*SW846 8260B*	*9062143*
Surr: 1,2-Dichloroethane-d4 (67-138%)	*100 %*					*06/18/09 20:36*	*SW846 8260B*	*9063105*
Surr: Dibromofluoromethane (75-125%)	*97 %*					*06/16/09 16:53*	*SW846 8260B*	*9062143*
Surr: Dibromofluoromethane (75-125%)	*93 %*					*06/18/09 20:36*	*SW846 8260B*	*9063105*
Surr: Toluene-d8 (76-129%)	*136 %*	*ZX*				*06/16/09 16:53*	*SW846 8260B*	*9062143*
Surr: Toluene-d8 (76-129%)	*97 %*					*06/18/09 20:36*	*SW846 8260B*	*9063105*
Surr: 4-Bromofluorobenzene (67-147%)	*203 %*	*ZX*				*06/16/09 16:53*	*SW846 8260B*	*9062143*
Surr: 4-Bromofluorobenzene (67-147%)	*103 %*					*06/18/09 20:36*	*SW846 8260B*	*9063105*
Polyaromatic Hydrocarbons by EPA 8270D								
Acenaphthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Acenaphthylene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (a) anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (a) pyrene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (b) fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (g,h,i) perylene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Benzo (k) fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Chrysene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Dibenz (a,h) anthracene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Fluoranthene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Fluorene	**0.218**		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Naphthalene	**0.549**		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Phenanthrene	**0.286**		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Pyrene	ND		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
1-Methylnaphthalene	**1.54**		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
2-Methylnaphthalene	**2.05**		mg/kg dry	0.103	1	06/17/09 21:33	SW846 8270D	9062159
Surr: Terphenyl-d14 (18-120%)	*87 %*					*06/17/09 21:33*	*SW846 8270D*	*9062159*
Surr: 2-Fluorobiphenyl (14-120%)	*76 %*					*06/17/09 21:33*	*SW846 8270D*	*9062159*
Surr: Nitrobenzene-d5 (17-120%)	*71 %*					*06/17/09 21:33*	*SW846 8270D*	*9062159*

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

CWM

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. |

2. Page 1 of

3. Generator's Name and Mailing Address
MCAS, Beaufort
Laurel Bay Housing
Beaufort SC 29904

4. Generator's Phone 843 228-8460

A. Manifest Number **WMNA** 10885473

B. State Generator's ID

5. Transporter 1 Company Name: EEG, Inc.

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone 843 879-0411

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HICKORY HILL LANDFILL
ROUTE 1, BOX 121
RIDGELAND SC 29936

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone 843 987-4543

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. Heating Oil Tank filled with Sand WM Profile # 1026558C	001		16.43	TN	
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

GENERATOR

J. Additional Descriptions for Materials Listed Above

Landfill _____ Solidification _____

Bio Remediation _____

K. Disposal Location

Cell Level

Grid

15. Special Handling Instructions and Additional Information
10 EA UST's From House's
1) 1058 Gardenia-1 2) 1061 Gardenia 3) 1068 Gardenia 4) 1070 Heather 5) 1072 Heather 6) 1104 Iris 7) 1077 Heather
Purchase Order # EMERGENCY CONTACT:

16. GENERATOR'S CERTIFICATION:

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.

Printed/Typed Name: William A. Drawdy | Signature "On behalf of": | Month Day Year: 06 12 09

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed/Typed Name: Jan Collins | Signature | Month Day Year: 06 12 09

CWM - NHM - 1 - 5/97

#2 - GENERATOR #1 COPY

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received

RECEIVED

State Use Only

MAR 19 2014

SC DHEC - Bureau of
Land & Waste Management

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

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier

1061 Gardenia St., Laurel Bay Military Housing Area
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ at Permit ID Number _____ may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. **This section must be completed.**

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES**____ **NO**_____ (check one)

If you answered **YES** to the above question, please complete the following information:

My policy provider is:_____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

IV. REQUEST FOR SUPERB FUNDING

I **DO** / DO **NOT** wish to participate in the SUPERB Program. (Circle one.)

V. CERTIFICATION (To be signed by the UST owner)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____
Name (Type or print.)

_____
Signature

To be completed by Notary Public:

Sworn before me this _____ day of_____, 20____

_____
(Name)

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

VI. UST INFORMATION

A.	Product...(ex. Gas, Kerosene).....	1061-1 Gardenia				
B.	Capacity..(ex. 1k, 2k).....	Heating oil				
C.	Age.....	280 gal				
D.	Construction Material..(ex. Steel, FRP).....	Late 1950s				
E.	Month/Year of Last Use.....	Steel				
F.	Depth (ft.) To Base of Tank.....	Mid 1980s				
G.	Spill Prevention Equipment Y/N.....	4'4"				
H.	Overfill Prevention Equipment Y/N.....	No				
I.	Method of Closure Removed/Filled.....	No				
J.	Date Tanks Removed/Filled.....	Removed				
K.	Visible Corrosion or Pitting Y/N.....	7/30/2013				
L.	Visible Holes Y/N.....	Yes				
		Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1061-1Gardenia was removed from the ground and disposed at a Subtitle "D" landfill. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1061-1Gardenia had been previously filled with sand by others.

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

VII. PIPING INFORMATION

	1061-1 Gardenia				
A. Construction Material..(ex. Steel, FRP).....	Steel & Copper				
B. Distance from UST to Dispenser.....	N/A				
C. Number of Dispensers.....	N/A				
D. Type of System Pressure or Suction.....	Suction				
E. Was Piping Removed from the Ground? Y/N	No				
F. Visible Corrosion or Pitting Y/N.....	Yes				
G. Visible Holes Y/N.....	No				
H. Age.....	Late 1950s				

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

Corrosion and pitting were found on the surface of the steel vent pipe. The copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

The USTs at the residences are constructed of single wall steel and formerly contained fuel oil for heating. These USTs were installed in the late 1950s and last used in the mid 1980s.

This is the second tank removed from this residence.

IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		X	
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.)		X	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		X	
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:		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1061-1 Gardenia	Excav at fill end	Soil	Sandy	4'4"	7/30/13 1430 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

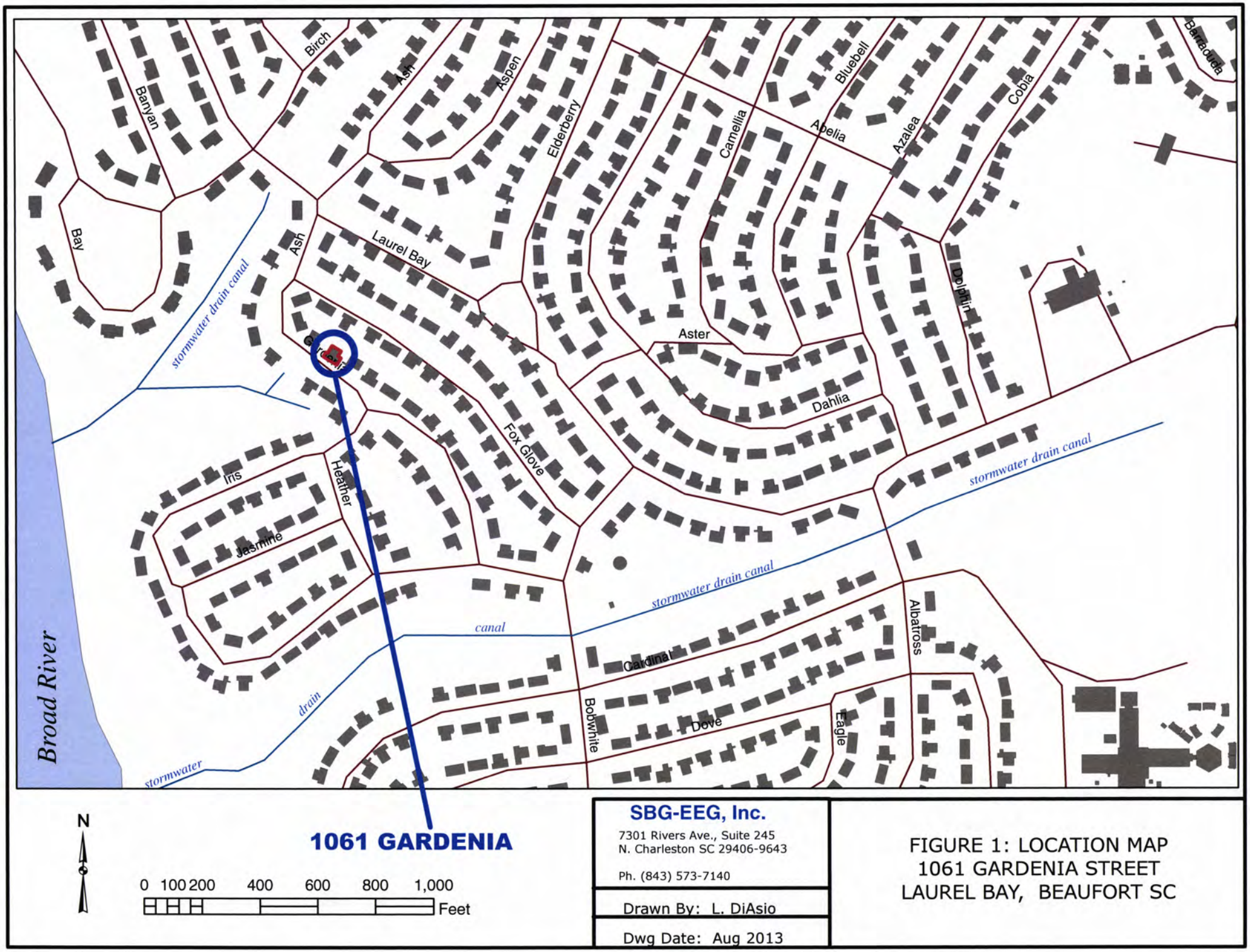
XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Broad River & drainage canal 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? *Sewer, water, electricity, cable, fiber optic & geothermal 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

XIII. SITE MAP

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

(Attach Site Map Here)

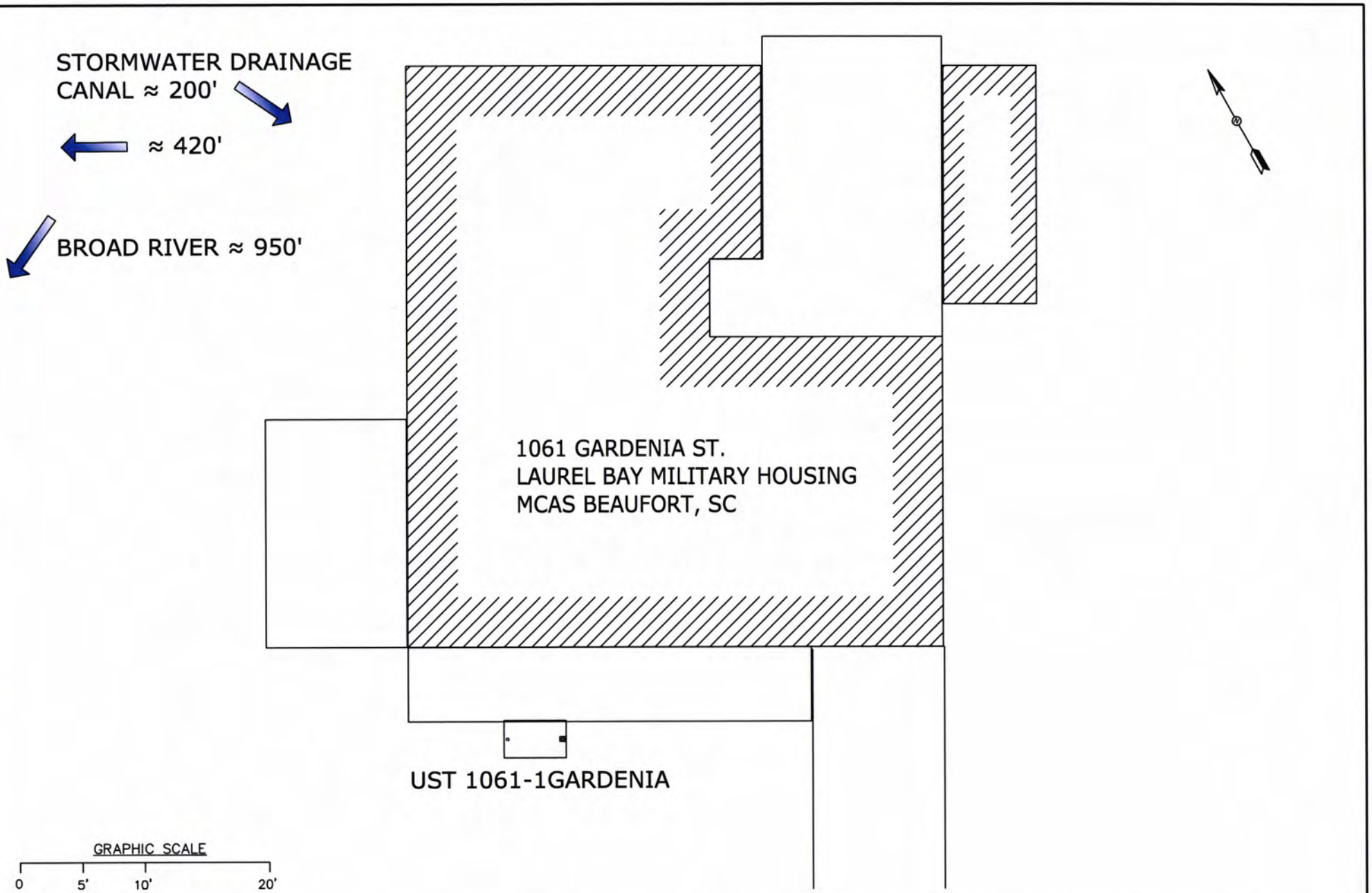


SBG-EEG, Inc.
7301 Rivers Ave., Suite 245
N. Charleston SC 29406-9643
Ph. (843) 573-7140

Drawn By: L. DiAsio

Dwg Date: Aug 2013

FIGURE 1: LOCATION MAP
1061 GARDENIA STREET
LAUREL BAY, BEAUFORT SC

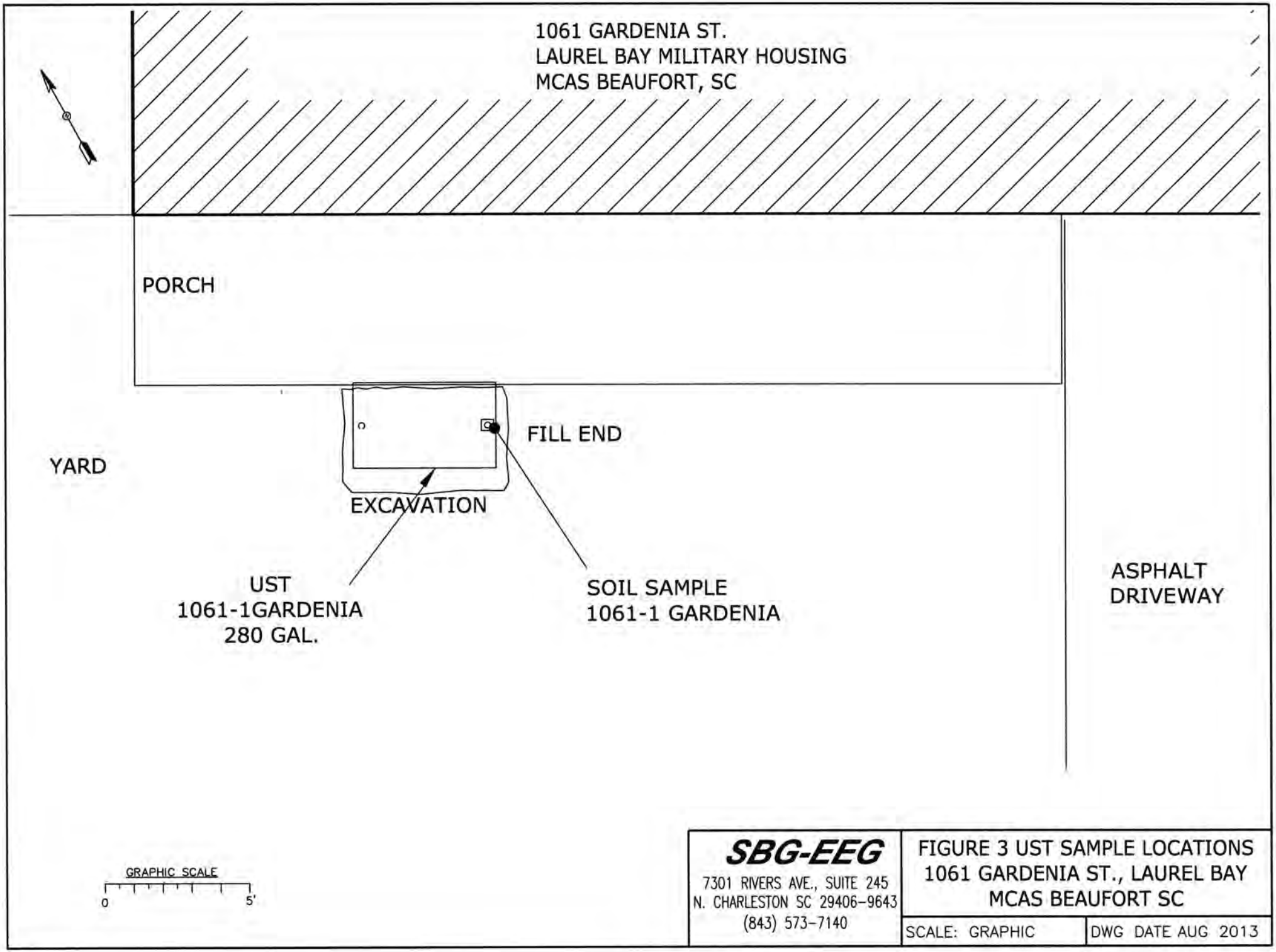


TANK DEPTH BELOW GRADE
1061-1GARDENIA = 16"

SBG-EEG
7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 2 SITE MAP
1061 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE AUG 2013



SBG-EEG
7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 3 UST SAMPLE LOCATIONS
1061 GARDENIA ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE AUG 2013

Picture 1: Location of UST 1061-1Gardenia.

Picture 2: UST 1061-1Gardenia excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	1061-1Gardenia						
Benzene	0.0107 mg/kg						
Toluene	ND						
Ethylbenzene	3.29 mg/kg						
Xylenes	3.85 mg/kg						
Naphthalene	24.2 mg/kg						
Benzo (a) anthracene	ND						
Benzo (b) fluoranthene	ND						
Benzo (k) fluoranthene	ND						
Chrysene	ND						
Dibenz (a, h) anthracene	ND						
TPH (EPA 3550)							

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

XV. ANALYTICAL RESULTS

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-32448-1
Client Project/Site: Laurel Bay Housing Project
Revision: 1

For:
Small Business Group Inc.
10179 Highway 78
Ladson, South Carolina 29456

Attn: Tom McElwee

Authorized for release by:
10/8/2013 3:48:59 PM

Ken Hayes, Project Manager I
(615)301-5035
ken.hayes@testamericainc.com

Table of Contents

Sample Summary

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-32448-1	694 Abelia	Solid	07/29/13 14:45	08/06/13 08:15
490-32448-2	1061-1 Gardenia	Solid	07/30/13 14:30	08/06/13 08:15
490-32448-3	1429 Albatross	Solid	07/31/13 14:45	08/06/13 08:15

Job ID: 490-32448-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-32448-1

REVISED REPORT: Revised to change the name for sample 490-32448-2 from 1061 Gardenia to 1061-1 Gardenia per client request. This report replaces the one generated on 08/12/13 @ 15:52.

Comments
No additional comments.

Receipt
The samples were received on 8/6/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was -0.1° C.

GC/MS VOA
Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 1061 Gardenia (490-32448-2), 1429 Albatross (490-32448-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 1061 Gardenia (490-32448-2), 1429 Albatross (490-32448-3).

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 98313 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 98313 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 1061 Gardenia (490-32448-2), 1429 Albatross (490-32448-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 98594.

Method(s) 8260B: The method blank for batch 98594 contained Toluene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270D: The following sample(s) was diluted due to the nature of the sample matrix and internal standard failure of the 1x.: 1061 Gardenia (490-32448-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: Surrogate recovery for the following sample(s) was outside control limits: 1061 Gardenia (490-32448-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 98575 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Client Sample ID: 694 Abelia
Date Collected: 07/29/13 14:45
Date Received: 08/06/13 08:15

Lab Sample ID: 490-32448-1
Matrix: Solid
Percent Solids: 89.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00220	0.000737	mg/Kg	¤	08/06/13 14:08	08/07/13 16:44	1
Ethylbenzene	ND		0.00220	0.000737	mg/Kg	¤	08/06/13 14:08	08/07/13 16:44	1
Naphthalene	ND		0.00550	0.00187	mg/Kg	¤	08/06/13 14:08	08/07/13 16:44	1
Toluene	ND		0.00220	0.000814	mg/Kg	¤	08/06/13 14:08	08/07/13 16:44	1
Xylenes, Total	ND		0.00330	0.000737	mg/Kg	¤	08/06/13 14:08	08/07/13 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/06/13 14:08*	*08/07/13 16:44*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/06/13 14:08*	*08/07/13 16:44*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/06/13 14:08*	*08/07/13 16:44*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/06/13 14:08*	*08/07/13 16:44*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.00998	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Acenaphthylene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Anthracene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Benzo[a]anthracene	ND		0.0668	0.0150	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Benzo[a]pyrene	ND		0.0668	0.0120	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Benzo[b]fluoranthene	ND		0.0668	0.0120	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Benzo[g,h,i]perylene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Benzo[k]fluoranthene	ND		0.0668	0.0140	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
1-Methylnaphthalene	ND		0.0668	0.0140	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Pyrene	ND		0.0668	0.0120	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Phenanthrene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Chrysene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Dibenz(a,h)anthracene	ND		0.0668	0.00698	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Fluoranthene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Fluorene	ND		0.0668	0.0120	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.00998	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
Naphthalene	ND		0.0668	0.00898	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1
2-Methylnaphthalene	ND		0.0668	0.0160	mg/Kg	¤	08/08/13 09:39	08/10/13 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*	*08/08/13 09:39*	*08/10/13 00:32*	*1*
Terphenyl-d14 (Surr)	*62*		*13 - 120*	*08/08/13 09:39*	*08/10/13 00:32*	*1*
Nitrobenzene-d5 (Surr)	*50*		*27 - 120*	*08/08/13 09:39*	*08/10/13 00:32*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10	0.10	%			08/06/13 14:11	1

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Client Sample ID: 1061-1 Gardenia
Date Collected: 07/30/13 14:30
Date Received: 08/06/13 08:15

Lab Sample ID: 490-32448-2
Matrix: Solid
Percent Solids: 68.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0107		0.00250	0.000836	mg/Kg	¤	08/06/13 14:08	08/07/13 17:11	1
Ethylbenzene	3.29		0.164	0.0557	mg/Kg	¤	08/06/13 14:13	08/08/13 19:58	1
Naphthalene	24.2		0.410	0.139	mg/Kg	¤	08/06/13 14:13	08/08/13 19:58	1
Toluene	ND		0.164	0.0606	mg/Kg	¤	08/06/13 14:13	08/08/13 19:58	1
Xylenes, Total	3.85		0.246	0.0557	mg/Kg	¤	08/06/13 14:13	08/08/13 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*08/06/13 14:13*	*08/08/13 19:58*	*1*
4-Bromofluorobenzene (Surr)	*1393*	*X*	*70 - 130*	*08/06/13 14:08*	*08/07/13 17:11*	*1*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*08/06/13 14:13*	*08/08/13 19:58*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:11*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/06/13 14:13*	*08/08/13 19:58*	*1*
Toluene-d8 (Surr)	*127*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:11*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/06/13 14:13*	*08/08/13 19:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.25		0.666	0.0995	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Acenaphthylene	0.648	J	0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Anthracene	0.499	J	0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Benzo[a]anthracene	ND		0.666	0.149	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Benzo[a]pyrene	ND		0.666	0.119	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Benzo[b]fluoranthene	ND		0.666	0.119	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Benzo[g,h,i]perylene	ND		0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Benzo[k]fluoranthene	ND		0.666	0.139	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
1-Methylnaphthalene	21.9		0.666	0.139	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Pyrene	0.556	J	0.666	0.119	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Phenanthrene	7.01		0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Chrysene	ND		0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Dibenz(a,h)anthracene	ND		0.666	0.0696	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Fluoranthene	ND		0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Fluorene	4.69		0.666	0.119	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Indeno[1,2,3-cd]pyrene	ND		0.666	0.0995	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
Naphthalene	4.79		0.666	0.0895	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10
2-Methylnaphthalene	22.2		0.666	0.159	mg/Kg	¤	08/08/13 09:39	08/10/13 19:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*29 - 120*	*08/08/13 09:39*	*08/10/13 19:46*	*10*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*08/08/13 09:39*	*08/10/13 19:46*	*10*
Nitrobenzene-d5 (Surr)	*125*	*X*	*27 - 120*	*08/08/13 09:39*	*08/10/13 19:46*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68		0.10	0.10	%			08/06/13 14:11	1

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Client Sample ID: 1429 Albatross

Date Collected: 07/31/13 14:45
Date Received: 08/06/13 08:15

Lab Sample ID: 490-32448-3

Matrix: Solid
Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00393		0.00201	0.000675	mg/Kg	☼	08/06/13 14:08	08/07/13 17:38	1
Ethylbenzene	2.47		0.130	0.0442	mg/Kg	☼	08/06/13 14:13	08/08/13 20:53	1
Naphthalene	19.4		0.325	0.111	mg/Kg	☼	08/06/13 14:13	08/08/13 20:53	1
Toluene	ND		0.130	0.0481	mg/Kg	☼	08/06/13 14:13	08/08/13 20:53	1
Xylenes, Total	3.90		0.195	0.0442	mg/Kg	☼	08/06/13 14:13	08/08/13 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*08/06/13 14:13*	*08/08/13 20:53*	*1*
4-Bromofluorobenzene (Surr)	*1280*	*X*	*70 - 130*	*08/06/13 14:08*	*08/07/13 17:38*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*08/06/13 14:13*	*08/08/13 20:53*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:38*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/06/13 14:13*	*08/08/13 20:53*	*1*
Toluene-d8 (Surr)	*120*		*70 - 130*	*08/06/13 14:08*	*08/07/13 17:38*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/06/13 14:13*	*08/08/13 20:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.957		0.0667	0.00995	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Acenaphthylene	0.283		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Anthracene	0.0642	J	0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Benzo[a]anthracene	0.143		0.0667	0.0149	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Benzo[a]pyrene	0.0636	J	0.0667	0.0119	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Benzo[b]fluoranthene	0.104		0.0667	0.0119	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Benzo[g,h,i]perylene	ND		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Benzo[k]fluoranthene	0.0425	J	0.0667	0.0139	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
1-Methylnaphthalene	9.68		0.667	0.139	mg/Kg	☼	08/08/13 09:39	08/10/13 20:08	10
Pyrene	0.521		0.0667	0.0119	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Phenanthrene	3.03		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Chrysene	0.176		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Dibenz(a,h)anthracene	ND		0.0667	0.00697	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Fluoranthene	0.259		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Fluorene	1.55		0.0667	0.0119	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Indeno[1,2,3-cd]pyrene	ND		0.0667	0.00995	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
Naphthalene	3.05		0.0667	0.00896	mg/Kg	☼	08/08/13 09:39	08/10/13 01:18	1
2-Methylnaphthalene	14.4		0.667	0.159	mg/Kg	☼	08/08/13 09:39	08/10/13 20:08	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*	*08/08/13 09:39*	*08/10/13 01:18*	*1*
Terphenyl-d14 (Surr)	*78*		*13 - 120*	*08/08/13 09:39*	*08/10/13 01:18*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*	*08/08/13 09:39*	*08/10/13 01:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10	0.10	%			08/06/13 14:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-32175-A-2-D MS
Matrix: Solid
Analysis Batch: 98313

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 97356

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0525	0.02165		mg/Kg	☼	41	31 - 143
Ethylbenzene	ND		0.0525	0.007450	F	mg/Kg	☼	14	23 - 161
Naphthalene	ND		0.0525	0.005081	J	mg/Kg	☼	10	10 - 176
Toluene	ND		0.0525	0.01517	F	mg/Kg	☼	29	30 - 155
Xylenes, Total	ND		0.105	0.01480	F	mg/Kg	☼	14	25 - 162

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 490-32175-A-2-E MSD
Matrix: Solid
Analysis Batch: 98313

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 97356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0506	0.04685	F	mg/Kg	☼	93	31 - 143	74	50
Ethylbenzene	ND		0.0506	0.04374	F	mg/Kg	☼	86	23 - 161	142	50
Naphthalene	ND		0.0506	0.04500	F	mg/Kg	☼	89	10 - 176	159	50
Toluene	ND		0.0506	0.04463	F	mg/Kg	☼	88	30 - 155	99	50
Xylenes, Total	ND		0.101	0.08749	F	mg/Kg	☼	86	25 - 162	142	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-98313/10
Matrix: Solid
Analysis Batch: 98313

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			08/07/13 15:14	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			08/07/13 15:14	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			08/07/13 15:14	1
Toluene	ND		0.00200	0.000740	mg/Kg			08/07/13 15:14	1
Xylenes, Total	ND		0.00300	0.000670	mg/Kg			08/07/13 15:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/07/13 15:14*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/07/13 15:14*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/07/13 15:14*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/07/13 15:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-98313/3
Matrix: Solid
Analysis Batch: 98313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05449		mg/Kg		109	75 - 127
Ethylbenzene	0.0500	0.05635		mg/Kg		113	80 - 134
Naphthalene	0.0500	0.06385		mg/Kg		128	69 - 150
Toluene	0.0500	0.05332		mg/Kg		107	80 - 132
Xylenes, Total	0.100	0.1093		mg/Kg		109	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 490-98313/4
Matrix: Solid
Analysis Batch: 98313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05536		mg/Kg		111	75 - 127	2	50
Ethylbenzene	0.0500	0.05575		mg/Kg		111	80 - 134	1	50
Naphthalene	0.0500	0.06436		mg/Kg		129	69 - 150	1	50
Toluene	0.0500	0.05307		mg/Kg		106	80 - 132	0	50
Xylenes, Total	0.100	0.1090		mg/Kg		109	80 - 137	0	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-98594/9
Matrix: Solid
Analysis Batch: 98594

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0340	mg/Kg			08/08/13 14:25	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			08/08/13 14:25	1
Naphthalene	ND		0.250	0.0850	mg/Kg			08/08/13 14:25	1
Toluene	0.03926	J	0.100	0.0370	mg/Kg			08/08/13 14:25	1
Xylenes, Total	ND		0.150	0.0340	mg/Kg			08/08/13 14:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/08/13 14:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/08/13 14:25*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/08/13 14:25*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/08/13 14:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-98594/3
Matrix: Solid
Analysis Batch: 98594

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05164		mg/Kg		103	75 - 127
Ethylbenzene	0.0500	0.05120		mg/Kg		102	80 - 134
Naphthalene	0.0500	0.05964		mg/Kg		119	69 - 150
Toluene	0.0500	0.04995		mg/Kg		100	80 - 132
Xylenes, Total	0.100	0.1018		mg/Kg		102	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 490-98594/4
Matrix: Solid
Analysis Batch: 98594

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05154		mg/Kg		103	75 - 127	0	50
Ethylbenzene	0.0500	0.05225		mg/Kg		105	80 - 134	2	50
Naphthalene	0.0500	0.06293		mg/Kg		126	69 - 150	5	50
Toluene	0.0500	0.04996		mg/Kg		100	80 - 132	0	50
Xylenes, Total	0.100	0.1044		mg/Kg		104	80 - 137	3	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-98575/1-A
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98575

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Anthracene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Pyrene	ND		0.0670	0.0120	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-98575/1-A
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98575

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Fluorene	ND		0.0670	0.0120	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		08/08/13 09:39	08/09/13 17:41	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		08/08/13 09:39	08/09/13 17:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/08/13 09:39*	*08/09/13 17:41*	*1*
Terphenyl-d14 (Surr)	*69*		*13 - 120*	*08/08/13 09:39*	*08/09/13 17:41*	*1*
Nitrobenzene-d5 (Surr)	*53*		*27 - 120*	*08/08/13 09:39*	*08/09/13 17:41*	*1*

Lab Sample ID: LCS 490-98575/2-A
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98575

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.485		mg/Kg		89	38 - 120
Anthracene	1.67	1.541		mg/Kg		92	46 - 124
Benzo[a]anthracene	1.67	1.474		mg/Kg		88	45 - 120
Benzo[a]pyrene	1.67	1.509		mg/Kg		91	45 - 120
Benzo[b]fluoranthene	1.67	1.621		mg/Kg		97	42 - 120
Benzo[g,h,i]perylene	1.67	1.535		mg/Kg		92	38 - 120
Benzo[k]fluoranthene	1.67	1.490		mg/Kg		89	42 - 120
1-Methylnaphthalene	1.67	1.353		mg/Kg		81	32 - 120
Pyrene	1.67	1.522		mg/Kg		91	43 - 120
Phenanthrene	1.67	1.525		mg/Kg		91	45 - 120
Chrysene	1.67	1.538		mg/Kg		92	43 - 120
Dibenz(a,h)anthracene	1.67	1.594		mg/Kg		96	32 - 128
Fluoranthene	1.67	1.541		mg/Kg		92	46 - 120
Fluorene	1.67	1.540		mg/Kg		92	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.538		mg/Kg		92	41 - 121
Naphthalene	1.67	1.261		mg/Kg		76	32 - 120
2-Methylnaphthalene	1.67	1.346		mg/Kg		81	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*
Terphenyl-d14 (Surr)	*72*		*13 - 120*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*

Lab Sample ID: 490-32009-A-1-B MS
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	0.0949		1.66	1.172		mg/Kg	☼	65	25 - 120
Anthracene	0.357		1.66	1.193		mg/Kg	☼	50	28 - 125

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-32009-A-1-B MS
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1.00		1.66	1.467		mg/Kg	¤	28	23 - 120
Benzo[a]pyrene	0.953		1.66	1.526		mg/Kg	¤	34	15 - 128
Benzo[b]fluoranthene	1.38		1.66	1.752		mg/Kg	¤	22	12 - 133
Benzo[g,h,i]perylene	0.604		1.66	1.370		mg/Kg	¤	46	22 - 120
Benzo[k]fluoranthene	0.463		1.66	1.355		mg/Kg	¤	54	28 - 120
1-Methylnaphthalene	0.0342	J	1.66	1.073		mg/Kg	¤	62	10 - 120
Pyrene	2.00		1.66	1.876	F	mg/Kg	¤	-7	20 - 123
Phenanthrene	1.66		1.66	1.434	F	mg/Kg	¤	-14	21 - 122
Chrysene	0.930		1.66	1.475		mg/Kg	¤	33	20 - 120
Dibenz(a,h)anthracene	0.132		1.66	1.197		mg/Kg	¤	64	12 - 128
Fluoranthene	2.19		1.66	1.634	F	mg/Kg	¤	-33	10 - 143
Fluorene	0.165		1.66	1.160		mg/Kg	¤	60	20 - 120
Indeno[1,2,3-cd]pyrene	0.526		1.66	1.330		mg/Kg	¤	48	22 - 121
Naphthalene	0.0826		1.66	1.019		mg/Kg	¤	56	10 - 120
2-Methylnaphthalene	0.0368	J	1.66	1.035		mg/Kg	¤	60	13 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*44*		*29 - 120*
Terphenyl-d14 (Surr)	*59*		*13 - 120*
Nitrobenzene-d5 (Surr)	*58*		*27 - 120*

Lab Sample ID: 490-32009-A-1-C MSD
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 98575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	0.0949		1.65	1.120		mg/Kg	¤	62	25 - 120	5	50
Anthracene	0.357		1.65	1.144		mg/Kg	¤	48	28 - 125	4	49
Benzo[a]anthracene	1.00		1.65	1.461		mg/Kg	¤	28	23 - 120	0	50
Benzo[a]pyrene	0.953		1.65	1.483		mg/Kg	¤	32	15 - 128	3	50
Benzo[b]fluoranthene	1.38		1.65	1.702		mg/Kg	¤	19	12 - 133	3	50
Benzo[g,h,i]perylene	0.604		1.65	1.343		mg/Kg	¤	45	22 - 120	2	50
Benzo[k]fluoranthene	0.463		1.65	1.373		mg/Kg	¤	55	28 - 120	1	45
1-Methylnaphthalene	0.0342	J	1.65	0.9343		mg/Kg	¤	55	10 - 120	14	50
Pyrene	2.00		1.65	1.908	F	mg/Kg	¤	-6	20 - 123	2	50
Phenanthrene	1.66		1.65	1.435	F	mg/Kg	¤	-14	21 - 122	0	50
Chrysene	0.930		1.65	1.485		mg/Kg	¤	34	20 - 120	1	49
Dibenz(a,h)anthracene	0.132		1.65	1.279		mg/Kg	¤	70	12 - 128	7	50
Fluoranthene	2.19		1.65	1.571	F	mg/Kg	¤	-38	10 - 143	4	50
Fluorene	0.165		1.65	1.123		mg/Kg	¤	58	20 - 120	3	50
Indeno[1,2,3-cd]pyrene	0.526		1.65	1.294		mg/Kg	¤	47	22 - 121	3	50
Naphthalene	0.0826		1.65	0.9171		mg/Kg	¤	51	10 - 120	10	50
2-Methylnaphthalene	0.0368	J	1.65	0.9464		mg/Kg	¤	55	13 - 120	9	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*37*		*29 - 120*
Terphenyl-d14 (Surr)	*55*		*13 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-32009-A-1-C MSD
Matrix: Solid
Analysis Batch: 98958

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 98575

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*52*		*27 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-32275-A-3 DU
Matrix: Solid
Analysis Batch: 98019

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.05	20

QC Association Summary

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

GC/MS VOA

Prep Batch: 97356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32175-A-2-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-32175-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 98103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32448-1	694 Abelia	Total/NA	Solid	5035	
490-32448-2	1061-1 Gardenia	Total/NA	Solid	5035	
490-32448-3	1429 Albatross	Total/NA	Solid	5035	

Prep Batch: 98105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32448-2	1061-1 Gardenia	Total/NA	Solid	5035	
490-32448-3	1429 Albatross	Total/NA	Solid	5035	

Analysis Batch: 98313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32175-A-2-D MS	Matrix Spike	Total/NA	Solid	8260B	97356
490-32175-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	97356
490-32448-1	694 Abelia	Total/NA	Solid	8260B	98103
490-32448-2	1061-1 Gardenia	Total/NA	Solid	8260B	98103
490-32448-3	1429 Albatross	Total/NA	Solid	8260B	98103
LCS 490-98313/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-98313/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-98313/10	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 98594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32448-2	1061-1 Gardenia	Total/NA	Solid	8260B	98105
490-32448-3	1429 Albatross	Total/NA	Solid	8260B	98105
LCS 490-98594/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-98594/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-98594/9	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 98575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32009-A-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-32009-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-32448-1	694 Abelia	Total/NA	Solid	3550C	
490-32448-2	1061-1 Gardenia	Total/NA	Solid	3550C	
490-32448-3	1429 Albatross	Total/NA	Solid	3550C	
LCS 490-98575/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-98575/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 98958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32009-A-1-B MS	Matrix Spike	Total/NA	Solid	8270D	98575
490-32009-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	98575
490-32448-1	694 Abelia	Total/NA	Solid	8270D	98575

GC/MS Semi VOA (Continued)

Analysis Batch: 98958 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32448-3	1429 Albatross	Total/NA	Solid	8270D	98575
LCS 490-98575/2-A	Lab Control Sample	Total/NA	Solid	8270D	98575
MB 490-98575/1-A	Method Blank	Total/NA	Solid	8270D	98575

Analysis Batch: 99139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32448-2	1061-1 Gardenia	Total/NA	Solid	8270D	98575
490-32448-3	1429 Albatross	Total/NA	Solid	8270D	98575

General Chemistry

Analysis Batch: 98019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-32275-A-3 DU	Duplicate	Total/NA	Solid	Moisture	
490-32448-1	694 Abelia	Total/NA	Solid	Moisture	
490-32448-2	1061-1 Gardenia	Total/NA	Solid	Moisture	
490-32448-3	1429 Albatross	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Client Sample ID: 694 Abelia

Lab Sample ID: 490-32448-1

Date Collected: 07/29/13 14:45
Matrix: Solid
Date Received: 08/06/13 08:15
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			98103	08/06/13 14:08	GLN	TAL NSH
Total/NA	Analysis	8260B		1	98313	08/07/13 16:44	MJH	TAL NSH
Total/NA	Prep	3550C			98575	08/08/13 09:39	JLP	TAL NSH
Total/NA	Analysis	8270D		1	98958	08/10/13 00:32	JLS	TAL NSH
Total/NA	Analysis	Moisture		1	98019	08/06/13 14:11	RRS	TAL NSH

Client Sample ID: 1061-1 Gardenia

Lab Sample ID: 490-32448-2

Date Collected: 07/30/13 14:30
Matrix: Solid
Date Received: 08/06/13 08:15
Percent Solids: 68.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			98103	08/06/13 14:08	GLN	TAL NSH
Total/NA	Analysis	8260B		1	98313	08/07/13 17:11	MJH	TAL NSH
Total/NA	Prep	5035			98105	08/06/13 14:13	GLN	TAL NSH
Total/NA	Analysis	8260B		1	98594	08/08/13 19:58	MJH	TAL NSH
Total/NA	Prep	3550C			98575	08/08/13 09:39	JLP	TAL NSH
Total/NA	Analysis	8270D		10	99139	08/10/13 19:46	JLS	TAL NSH
Total/NA	Analysis	Moisture		1	98019	08/06/13 14:11	RRS	TAL NSH

Client Sample ID: 1429 Albatross

Lab Sample ID: 490-32448-3

Date Collected: 07/31/13 14:45
Matrix: Solid
Date Received: 08/06/13 08:15
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			98103	08/06/13 14:08	GLN	TAL NSH
Total/NA	Analysis	8260B		1	98313	08/07/13 17:38	MJH	TAL NSH
Total/NA	Prep	5035			98105	08/06/13 14:13	GLN	TAL NSH
Total/NA	Analysis	8260B		1	98594	08/08/13 20:53	MJH	TAL NSH
Total/NA	Analysis	8270D		1	98958	08/10/13 01:18	JLS	TAL NSH
Total/NA	Prep	3550C			98575	08/08/13 09:39	JLP	TAL NSH
Total/NA	Analysis	8270D		10	99139	08/10/13 20:08	JLS	TAL NSH
Total/NA	Analysis	Moisture		1	98019	08/06/13 14:11	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Small Business Group Inc.
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-32448-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-13
AIHA	IHLAP		100790	09-01-13
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Charleston

490-32448 Chain of Custody

Cooler Received/Opened On 8/6/2013@ 00815

1. Tracking # 6143 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97460373

2. Temperature of rep. sample or temp blank when opened: -0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA DAR-6-13

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) ELA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ELA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ELA

I certify that I attached a label with the unique LIMS number to each container (intial) ELA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

10/8/2013

10/8/2013

eurofins | TestAmerica
Nashville Division
2960 Foster Creighton
Nashville, TN 37204
Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

Client Name/Account #: EEG - SBG # 2449
Address: 10179 Highway 78
City/State/Zip: Ladson, SC 29456
Project Manager: Tom McElwee email: mcelwee@eeginc.net
Telephone Number: 843.412.2997 Fax No.: 843-879-0401
Sampler Name: (Print) Pratt Shaw
Sampler Signature:

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring? Yes ____ No ____
Enforcement Action? Yes ____ No ____

Site State: SC
PO#: 1035
TA Quote #:
Project ID: Laurel Bay Housing Project
Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	Methanol Bisulfate	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify) Methanol	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: BTEX + Napth - 8260	PAH - 8270D	Loc: 490 32448	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
694 Abalia	7/29/13	1445	5	X					2				2	1					X		X	X					
106 Gardenia	7/30/13	1430	5	X					2				2	1					X		X	X					
1429 Albatross	7/31/13	1445	5	X					2				2	1					X		X	X					

Special Instructions:

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
	8/5/13	0900	FedEx		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
			TAN	8-6-13	8:15-0.1

Method of Shipment: FEDEX

106 - 1 Gardenia 8/30/13

Login Sample Receipt Checklist

Client: Small Business Group Inc.

Job Number: 490-32448-1

Login Number: 32448
List Number: 1
Creator: Abernathy, Eric

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT A

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST | 1. Generator's US EPA ID No. | Manifest Doc No. | 2. Page 1 of 1

GENERATOR

3. Generator's Mailing Address:
MCAS BEAUFORT
LAUREL BAY HOUSING
BEAUFORT, SC 29904
4. Generator's Phone 843-879-0411

Generator's Site Address (If different than mailing):

A. Manifest Number WMNA 01519101
B. State Generator's ID

5. Transporter 1 Company Name EEG Inc
10179 Hwy 78
Ladson SC 29456

6. US EPA ID Number

C. State Transporter's ID
D. Transporter's Phone (843) 819-0400

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
HICKORY HILL LANDFILL
2621 LOW COUNTRY DRIVE
RIDGELAND, SC 29936

10. US EPA ID Number

G. State Facility ID
H. State Facility Phone 843-987-4643

Received
9/3. Lenny
1429.

11. Description of Waste Materials			13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. HEATING OIL TANK FILLED WITH SAND	WM Profile # 102655SC		9.93	TON	715042
b.	WM Profile #				
c.	WM Profile #				
d.	WM Profile #				

J. Additional Descriptions for Materials Listed Above

K. Disposal Location
Cell | Level
Grid

15. Special Handling Instructions and Additional Information
USTs from: 1) 1061 Gardenia ✓ 2) 1429 Albatross ✓ 3) 460 Elderberry ✓ 4) 535 Laurel Bay ✓ 5) 409 Elderberry ✓ 6) 913 Barracuda

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:
I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
Timothy Whaley	Timothy Whaley	8	14	13

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Pratt Shaw		8	14	13

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
James Baldwin	James Baldwin			

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
Tony Cofield	Tony Cofield	8	14	13

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Blue- GENERATOR #2 COPY
Yellow- GENERATOR #1 COPY
Pink- FACILITY USE ONLY
Gold- TRANSPORTER #1 COPY

Appendix C
Laboratory Analytical Reports - 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 7/28/08
Pace Project No.: 9224472

Sample: 1057 GARDENIA A **Lab ID: 9224472004** Collected: 07/28/08 10:50 Received: 07/30/08 17:00 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)	56	%	50-150	1	07/31/08 00:00	08/12/08 06:42	4165-60-0	
2-Fluorobiphenyl (S)	64	%	50-150	1	07/31/08 00:00	08/12/08 06:42	321-60-8	
Terphenyl-d14 (S)	99	%	50-150	1	07/31/08 00:00	08/12/08 06:42	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/01/08 06:41	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/01/08 06:41	100-41-4	
Naphthalene	ND	ug/L	1.0	1		08/01/08 06:41	91-20-3	
Toluene	ND	ug/L	1.0	1		08/01/08 06:41	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		08/01/08 06:41	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		08/01/08 06:41	95-47-6	
4-Bromofluorobenzene (S)	95	%	87-109	1		08/01/08 06:41	460-00-4	
Dibromofluoromethane (S)	103	%	85-115	1		08/01/08 06:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	79-120	1		08/01/08 06:41	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		08/01/08 06:41	2037-26-5	

Sample: 1061 GARDENIA A **Lab ID: 9224472005** Collected: 07/28/08 11:00 Received: 07/30/08 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:05	83-32-9	
Acenaphthylene	ND	ug/L	1.5	1	07/31/08 00:00	08/12/08 07:05	208-96-8	
Anthracene	ND	ug/L	0.050	1	07/31/08 00:00	08/12/08 07:05	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:05	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.30	1	07/31/08 00:00	08/12/08 07:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	53-70-3	
Fluoranthene	ND	ug/L	0.30	1	07/31/08 00:00	08/12/08 07:05	206-44-0	
Fluorene	ND	ug/L	0.31	1	07/31/08 00:00	08/12/08 07:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:05	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:05	91-57-6	
Naphthalene	ND	ug/L	1.5	1	07/31/08 00:00	08/12/08 07:05	91-20-3	
Phenanthrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:05	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:05	129-00-0	
Nitrobenzene-d5 (S)	66	%	50-150	1	07/31/08 00:00	08/12/08 07:05	4165-60-0	
2-Fluorobiphenyl (S)	73	%	50-150	1	07/31/08 00:00	08/12/08 07:05	321-60-8	
Terphenyl-d14 (S)	99	%	50-150	1	07/31/08 00:00	08/12/08 07:05	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/01/08 07:04	71-43-2	

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 7/28/08
Pace Project No.: 9224472

Sample: 1061 GARDENIA A **Lab ID: 9224472005** Collected: 07/28/08 11:00 Received: 07/30/08 17:00 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		08/01/08 07:04	100-41-4	
Naphthalene	ND	ug/L	1.0	1		08/01/08 07:04	91-20-3	
Toluene	ND	ug/L	1.0	1		08/01/08 07:04	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		08/01/08 07:04	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		08/01/08 07:04	95-47-6	
4-Bromofluorobenzene (S)	93	%	87-109	1		08/01/08 07:04	460-00-4	
Dibromofluoromethane (S)	105	%	85-115	1		08/01/08 07:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120	1		08/01/08 07:04	17060-07-0	
Toluene-d8 (S)	101	%	70-120	1		08/01/08 07:04	2037-26-5	

Sample: 1056 GARDENIA A **Lab ID: 9224472006** Collected: 07/28/08 11:15 Received: 07/30/08 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE 3510	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:28	83-32-9	
Acenaphthylene	ND	ug/L	1.5	1	07/31/08 00:00	08/12/08 07:28	208-96-8	
Anthracene	ND	ug/L	0.050	1	07/31/08 00:00	08/12/08 07:28	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:28	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.30	1	07/31/08 00:00	08/12/08 07:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	53-70-3	
Fluoranthene	ND	ug/L	0.30	1	07/31/08 00:00	08/12/08 07:28	206-44-0	
Fluorene	ND	ug/L	0.31	1	07/31/08 00:00	08/12/08 07:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:28	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.0	1	07/31/08 00:00	08/12/08 07:28	91-57-6	
Naphthalene	ND	ug/L	1.5	1	07/31/08 00:00	08/12/08 07:28	91-20-3	
Phenanthrene	ND	ug/L	0.20	1	07/31/08 00:00	08/12/08 07:28	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/31/08 00:00	08/12/08 07:28	129-00-0	
Nitrobenzene-d5 (S)	39	%	50-150	1	07/31/08 00:00	08/12/08 07:28	4165-60-0	1g
2-Fluorobiphenyl (S)	51	%	50-150	1	07/31/08 00:00	08/12/08 07:28	321-60-8	
Terphenyl-d14 (S)	70	%	50-150	1	07/31/08 00:00	08/12/08 07:28	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/01/08 07:28	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/01/08 07:28	100-41-4	
Naphthalene	ND	ug/L	1.0	1		08/01/08 07:28	91-20-3	
Toluene	ND	ug/L	1.0	1		08/01/08 07:28	108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		08/01/08 07:28	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		08/01/08 07:28	95-47-6	
4-Bromofluorobenzene (S)	96	%	87-109	1		08/01/08 07:28	460-00-4	

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants
Laboratory ID: OG25027-007
Description: BEALB1061TW01WG20130724
Matrix: Aqueous
Date Sampled: 07/24/2013 1455
Date Received: 07/25/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	08/02/2013 1529	ALL		26393

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.13	J	0.50	0.25	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	3.0		0.50	0.25	0.17	ug/L	1
Naphthalene	91-20-3	8260B	9.0	B	0.50	0.25	0.12	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.25	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.21	J	0.50	0.25	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-120
Toluene-d8		98	85-120
Bromofluorobenzene		109	75-120
Dibromofluoromethane		97	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

Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants
Laboratory ID: OG25027-007
Description: BEALB1061TW01WG20130724
Matrix: Aqueous
Date Sampled: 07/24/2013 1455
Date Received: 07/25/2013

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/26/2013 1402	RBH	07/25/2013 1509	25843

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	ND		0.21	0.10	0.085	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		0.21	0.10	0.091	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.21	0.10	0.096	ug/L	1
Chrysene	218-01-9	8270D	ND		0.21	0.10	0.056	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.21	0.10	0.060	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		75	50-110
Nitrobenzene-d5		80	40-110
Terphenyl-d14		51	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 >_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

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Volatile Organic Compounds by GC/MS

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QK20097-011**
Description: **BEALB1061TW03WG20151120**
Matrix: **Aqueous**
Date Sampled: **11/20/2015 1025**
Date Received: **11/20/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/01/2015 2138	ALL		91002

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.88**	**BJ**	**5.0**	0.96	**0.14**	**ug/L**	**1**
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	75-120
1,2-Dichloroethane-d4		102	70-120
Toluene-d8		103	85-120
Dibromofluoromethane		100	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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QK20097-011**
Description: **BEALB1061TW03WG20151120**
Matrix: **Aqueous**
Date Sampled: **11/20/2015 1025**
Date Received: **11/20/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/04/2015 0158	RBH	11/24/2015 1615	90443

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		60	15-139
Fluoranthene-d10		33	23-154

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
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

Appendix D
Laboratory Analytical Report - Vapor

CDM - AECOM
Multimedia Joint Venture

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **AECOM**
Client Sample ID: **BEALB1061NS01GS20170427** ALS Project ID: P1702123
Client Project ID: **WE56-145 Gardenia Drive / 60342031.FI.WI** ALS Sample ID: P1702123-001

Test Code: EPA TO-15 Date Collected: 4/27/17
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 5/5/17
Analyst: Cory Lewis Date Analyzed: 5/8/17
Sampling Media: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00217

Initial Pressure (psig): -0.93 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	LOQ µg/m³	LOD µg/m³	MDL µg/m³	Data Qualifier
71-43-2	Benzene	**6.5**	1.8	1.5	0.58	
108-88-3	Toluene	**8.5**	1.8	1.5	0.62	
100-41-4	Ethylbenzene	**1.8**	1.8	1.5	0.58	**J**
179601-23-1	m,p-Xylenes	**5.1**	3.7	3.1	1.1	
95-47-6	o-Xylene	**1.9**	1.8	1.5	0.55	
91-20-3	Naphthalene	**1.0**	1.8	1.6	0.66	**J**

U = Undetected at the limit of detection: The associated data value is the limit of detection, adjusted by any dilution factor used in the analysis.
LOQ = Limit of Quantitation - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the LOQ but greater than or equal to the MDL.

Appendix E
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

D H E C

PROMOTE PROTECT PROSPER

13 August 2008

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

Re: MCAS – Laurel Bay Housing – 1061 Gardenia
Site ID # 03973
UST Closure Reports received 31 January 2008
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 sample be collected from this site. Please note, the Department approved a groundwater sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

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

D H E C
PROMOTE PROTECT PROSPER

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

18 December 2008

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

Re: MCAS – Laurel Bay Housing – 1061 Gardenia
Site ID # 03973
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

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

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

August 19, 2009

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

Re: MCAS – Laurel Bay Housing – 1061 Gardenia St.
Site ID # 03973
UST Closure Reports received August 17, 2009
Beaufort County

Dear Mr. Ehde:

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 sample be collected from this site. Please note, the Department approved a groundwater-sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

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

Sincerely,

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

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

D H E C
PROMOTE PROTECT PROSPER

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 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
Specifice Property Recommendations
Dated August 6, 2015

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

Permanent Monitoring Well Investigation recommendation (10 addresses/11 tanks)	
119 Banyan	156 Laurel Bay
128 Banyan	1033 Foxglove
132 Banyan	1055 Gardenia
135 Birch	1059 Gardenia
148 Laurel Bay	1168 Jasmine
No Further Action recommendation (25 addresses/27 tanks):	
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	

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

July 1, 2015

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

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

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent M. Krieg

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

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

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: IGWA
Dated 7/1/2015

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

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

Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

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

D H E C
PROMOTE PROTECT PROSPER

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

Division of Waste Management
Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015
Laurel Bay Military Housing Area Multiple Properties
Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

If you have any questions, please contact me at 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-November and December 2015
Specific Property Recommendations
Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

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

No Further Action recommendation (80 addresses)	
118 Banyan Drive	644 Dahlia Drive
126 Banyan Drive	646 Dahlia Drive
127 Banyan Drive	665 Camellia Drive
141 Laurel Bay Blvd	699 Abelia Street
151 Laurel Bay Blvd	744 Blue Bell Lane
224 Cypress Street	745 Blue Bell Lane
227 Cypress Street	751 Blue Bell Lane
257 Beech Street	762 Althea Street
264 Beech Street	765 Althea Street
265 Beech Street	766 Althea Street
275 Birch Drive	767 Althea Street
277 Birch Drive	768 Althea Street
297 Birch Drive	769 Althea Street
301 Ash Street	819 Azalea Drive
306 Ash Street	840 Azalea Drive
310 Ash Street	878 Cobia Drive
313 Ash Street	891 Cobia Drive
315 Ash Street	913 Barracuda Drive
316 Ash Street	916 Barracuda Drive
319 Ash Street	923 Wren Lane
320 Ash Street	1004 Bobwhite Drive
321 Ash Street	1022 Foxglove Street
329 Ash Street	1031 Foxglove Street
332 Ash Street	1061 Gardenia Drive
333 Ash Street	1064 Gardenia Drive
341 Ash Street	1067 Gardenia Drive
347 Ash Street	1077 Heather Street
378 Aspen Street	1081 Heather Street
379 Aspen Street	1101 Iris Lane
382 Aspen Street	1105 Iris Lane
394 Acorn Street	1142 Iris Lane
400 Elderberry Drive	1146 Iris Lane
432 Elderberry Drive	1218 Cardinal Lane
436 Elderberry Drive	1240 Dove Lane
482 Laurel Bay Blvd	1266 Dove Lane
517 Laurel Bay Blvd	1292 Eagle Lane
586 Aster Street	1299 Eagle Lane
632 Dahlia Drive	1302 Eagle Lane
639 Dahlia Drive	1336 Albatross Drive
643 Dahlia Drive	1351 Cardinal Lane

dhec
Healthy People. Healthy Communities.

August 29, 2018

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

RE: Approval Draft Final Letter Report-Petroleum Vapor Intrusion Investigations
April 2017 through February 2018
Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the Vapor Intrusion Investigation Report for multiple properties on July 30, 2018. 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).

DHEC has reviewed the Investigation Report and based on this review, DHEC did not generate any comments on the report. Please note that DHEC'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, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus

Laurel Petrus, Environmental Engineer Associate
Bureau of Land and Waste Management

Cc: EQC Region 8
Shawn Dolan, Resolution Consultants
Bryan Beck, NAVFAC MIDLANT