

SUMMARY REPORT
392 ELDERBERRY DRIVE (FORMERLY 441 ELDERBERRY DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



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

JUNE 2021

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Prepared by:

CDM - AECOM
Multimedia Joint Venture

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

Contract Number: N62470-14-D-9016
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List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
ft	feet
IDIQ	Indefinite Delivery, Indefinite Quantity
IGWA	Initial Groundwater Assessment
JV	Joint Venture
LBMH	Laurel Bay Military Housing
LTM	long-term monitoring
MCAS	Marine Corps Air Station
NAVFAC Mid-Lant	Naval Facilities Engineering Command Mid-Atlantic
NFA	No Further Action
PAH	polynuclear aromatic hydrocarbon
QAPP	Quality Assurance Program Plan
RBSL	risk-based screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	LBMH area at MCAS Beaufort, South Carolina
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 392 Elderberry Drive (Formerly 441 Elderberry Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil UST. 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 heating oil USTs and conduct sampling activities to determine if, and to what extent, petroleum constituents may have impacted the surrounding environment. MCAS Beaufort coordinated with the 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 IGWA sampling process utilizes temporary groundwater sampling points that are typically installed and sampled within the same day. The intent of the sampling point is to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations may require additional delineation of COPCs in groundwater. These sampling points are not subjected to the same installation standards as permanent monitoring wells and, as such; the data obtained from the IGWA wells can sometimes be biased high and is considered preliminary data. In order to confirm the presence of any impact to groundwater, a permanent well is installed where IGWA sampling has indicated the presence of COPCs is in excess of the SCDHEC RBSLs for groundwater. If COPCs are found to be present in the permanent well, additional permanent wells are installed to delineate the extent of impact to groundwater and a sampling program (long-term monitoring [LTM]) is established. LTM is conducted at the property until COPC concentrations in groundwater sampled from all permanent monitoring wells are less than the SCDHEC RBSLs for three or more consecutive sampling events. Groundwater analytical results from permanent wells 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 392 Elderberry Drive (Formerly 441 Elderberry Drive). The sampling activities at 392 Elderberry Drive (Formerly 441 Elderberry Drive) comprised a soil investigation, IGWA sampling, installation and sampling of three permanent monitoring wells and LTM sampling. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 441 Elderberry Drive* (MCAS Beaufort, 2007). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking*

Heating Oil UST Sites (Pandey Environmental LLC, 2008). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the permanent well installations and initial sampling activities at this site are provided in the *Report of Findings for Laurel Bay Military Housing Area Investigation of Potential Impacts to Groundwater from Former Heating Oil Underground Storage Tanks* (Tetra Tech NUS, Inc, 2010). The laboratory reports that includes the pertinent groundwater analytical results for this site are presented in Appendix D. Details regarding the LTM activities to date at this site are provided in the *2015 Groundwater Monitoring Report* (Resolution Consultants, 2015). A comprehensive table of the historical groundwater analytical results for all permanent monitoring wells at the site through 2014 is presented in Appendix E.

2.1 UST Removal and Soil Sampling

On August 14, 2006, a single 280 gallon heating oil UST was removed from the front grassed area at 392 Elderberry Drive (Formerly 441 Elderberry Drive). The former UST location is indicated on the sketch of the UST Assessment Report (Appendix B). The UST 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 Report (Appendix B), the depth to the base of the UST was 6'0" bgs and a single soil sample was collected from that depth. An additional soil sample was collected from the side of the excavation. The samples were collected from the fill port side of the former UST 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 is presented in Table 1. A copy of the laboratory analytical data reports are included in the UST Assessment Report 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 location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or No Further Action [NFA]) for the property. The soil results collected from

the former UST location at 392 Elderberry Drive (Formerly 441 Elderberry Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated October 25, 2007, SCDHEC requested an IGWA for 392 Elderberry Drive (Formerly 441 Elderberry Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix F.

2.3 Initial Groundwater Sampling

On July 23, 2008, a single temporary monitoring well was installed at 392 Elderberry Drive (Formerly 441 Elderberry Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on the sketch of the UST Assessment Report (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites* (Pandey Environmental LLC, 2008).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporary monitoring well. Following well installation, a groundwater sample was collected using screen point sampler methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71.H-I (SCDHEC, 2016). Field forms are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites* (Pandey Environmental LLC, 2008).

2.4 Initial Groundwater Analytical Results

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

The groundwater results collected from 392 Elderberry Drive (Formerly 441 Elderberry Drive) were greater than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated further investigation was required. In a letter dated December 8, 2008, SCDHEC requested a permanent well be installed for 392 Elderberry Drive (Formerly 441 Elderberry Drive) to confirm the impact to groundwater detected in the temporary well sample. SCDHEC's request letter is provided in Appendix F.

2.5 Permanent Well Groundwater Sampling

In February 2010, three permanent monitoring wells were installed at 392 Elderberry Drive (Formerly 441 Elderberry Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, a permanent monitoring well, MW117, was placed in the same general location as the former heating oil UST and the IGWA sample location. The former UST location is indicated on the sketch of the UST Assessment Report (Appendix B). Two additional permanent wells (MW118 and MW119) were also installed around the property at 392 Elderberry Drive (Formerly 441 Elderberry Drive) to delineate potential contamination. Further details are provided in the *Report of Findings for Laurel Bay Military Housing Area Investigation of Potential Impacts to Groundwater from Former Heating Oil Underground Storage Tanks* (Tetra Tech NUS, Inc, 2010).

The sampling strategy for this phase of the investigation required an initial sampling event of the permanent monitoring wells. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Field forms are provided in the *Report of Findings for Laurel Bay Military Housing Area Investigation of Potential Impacts to Groundwater from Former Heating Oil Underground Storage Tanks* (Tetra Tech NUS, Inc, 2010).

2.6 Permanent Well Groundwater Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 3. A copy of the analytical data are included in Appendix D.

The groundwater results collected from 392 Elderberry Drive (Formerly 441 Elderberry Drive) at MW119 were greater than the SCDHEC RBSLs (Table 3), which indicated that further investigation was required. In a letter dated April 6, 2011, SCDHEC requested that LTM be carried out for 392 Elderberry Drive (Formerly 441 Elderberry Drive) to continue to monitor the impact to groundwater detected in the permanent well sample (MW119). SCDHEC's request letter is provided in Appendix F.

2.7 Long Term Monitoring

The LTM program at 392 Elderberry Drive (Formerly 441 Elderberry Drive) consisted of annual groundwater sampling at the three permanent monitoring wells. LTM sampling activities were

conducted in 2011 and then annually from 2013 until 2014 at the referenced site. The latest groundwater sampling details are provided in the *2014 Groundwater Monitoring Report* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required annual LTM sampling of the permanent wells until an optimized monitoring strategy (e.g., reduced COPCs, reduced sampling frequency, reduce number of wells, etc.) or NFA determination could be made for the site. During each LTM sampling event, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Field forms from the most recent sampling event at 392 Elderberry Drive (Formerly 441 Elderberry Drive) are provided in the *2014 Groundwater Monitoring Report* (Resolution Consultants, 2015).

2.8 Long Term Monitoring Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 4. A comprehensive table of the historical groundwater analytical results for all permanent monitoring wells at the site through 2014 is presented in Appendix E. The associated laboratory analytical data reports are located in each of the annual LBMH groundwater monitoring reports.

The groundwater results collected from 392 Elderberry Drive (Formerly 441 Elderberry Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 4) during the 2011, 2013 and 2014 groundwater sampling events. This indicated that the groundwater was no longer impacted by COPCs associated with the former UST at concentrations that may present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater collected from the permanent monitoring wells during the three most recent sampling events, SCDHEC made the determination that NFA was required for 392 Elderberry Drive (Formerly 441 Elderberry Drive). The NFA determination for groundwater was obtained in a letter dated June 4, 2015. SCDHEC's letter is provided in Appendix F.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2007. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 441 Elderberry Drive, Laurel Bay Military Housing Area*, August 2007.

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. *2014 Groundwater Monitoring Report for Laurel Bay Military Housing Area, Long-Term Monitoring (LTM), Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, March 2015.

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

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

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

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

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

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

Tetra Tech NUS, Inc, 2010. *Report of Findings for Laurel Bay Military Housing Area Investigation of Potential Impacts to Groundwater from Former Heating Oil Underground Storage Tanks*, July 2010.

Tables

Table 1
Laboratory Analytical Results - Soil
392 Elderberry Drive (Formerly 441 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Samples Collected 08/14/06	
		441-01 Bottom	441-02 Side
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	ND
Ethylbenzene	1.15	1.48	0.781
Naphthalene	0.036	15.60	10.2
Toluene	0.627	0.127	0.117
Xylenes, Total	13.01	4.53	1.48
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.066	0.242	0.619
Benzo(b)fluoranthene	0.066	ND	0.454
Benzo(k)fluoranthene	0.066	ND	0.463
Chrysene	0.066	ND	0.874
Dibenz(a,h)anthracene	0.066	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 - Initial Groundwater
392 Elderberry Drive (Formerly 441 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs ⁽²⁾	Results Samples Collected 07/23/08
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	1.2
Naphthalene	25	29.33	15.0
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 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 1×10^{-6} , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Table 3
Laboratory Analytical Results - Permanent Monitoring Well Groundwater
392 Elderberry Drive (Formerly 441 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs ⁽²⁾	Results Sample Collected 03/04/2010		
			MW117	MW118	MW119
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)					
Benzene	5	16.24	ND	ND	ND
Ethylbenzene	700	45.95	ND	ND	2.56
Naphthalene	25	29.33	ND	1.05	12.8
Toluene	1000	105,445	ND	ND	0.46
Xylenes, Total	10,000	2,133	ND	ND	8.56
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)					
1-Methylnaphthalene	10	NA	ND	ND	10.6
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 1×10^{-6} , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

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 4
Laboratory Analytical Results - Long Term Monitoring
392 Elderberry Drive (Formerly 441 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene
SCDHEC RBSLs ⁽¹⁾ (µg/L)	5	700	25	1000	10,000	10	10	10	10	10
Site-Specific Groundwater VISLs ⁽²⁾ (µg/L)	16.24	45.95	29.33	105,445	2,133	N/A	N/A	N/A	N/A	N/A
Well ID	Sample Date									
BEALB441MW117	11/9/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7/31/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/11/2014	ND	ND	0.54	ND	ND	ND	ND	ND	ND
BEALB441MW118	11/9/2011	ND	0.88	13	ND	ND	ND	ND	ND	ND
	7/31/2013	ND	ND	6.9	ND	ND	ND	ND	ND	ND
	9/11/2014	ND	ND	2.7	ND	ND	ND	ND	ND	ND
BEALB441MW119	11/9/2011	ND	0.42	5.3	ND	ND	ND	ND	ND	ND
	7/31/2013	ND	0.22	7.0	ND	ND	ND	ND	ND	ND
	9/11/2014	ND	0.33	8.1	ND	ND	ND	ND	ND	ND

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0 (SCDHEC, April 2013).

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

Bold font indicates the analyte was detected.

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

JE - Johnson & Ettinger

N/A - not applicable

NA - not analyzed

ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). A comprehensive table of the historical groundwater analytical results for all permanent monitoring wells at the site through 2015 is presented in Appendix E.

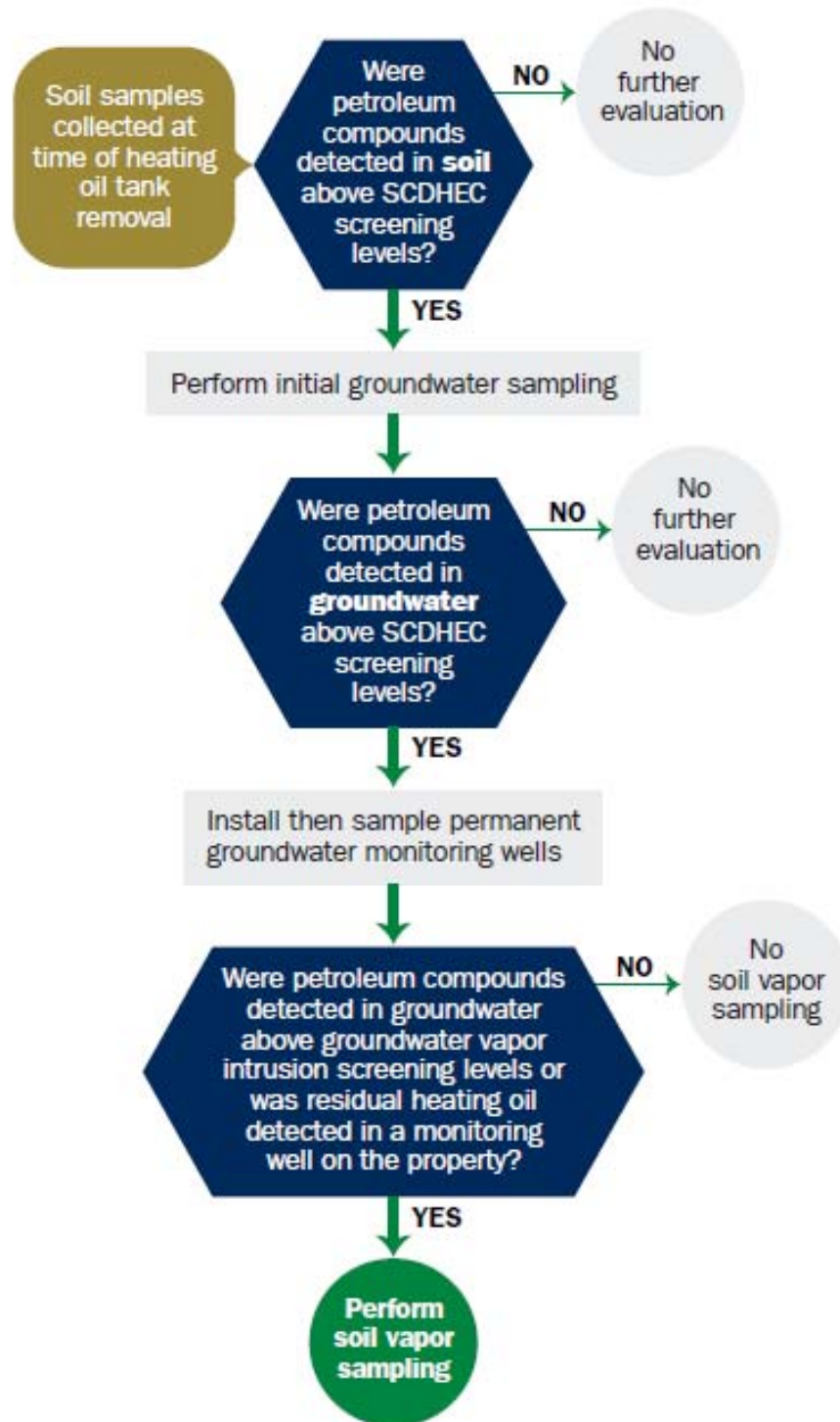
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

441 Elderberry

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

Date Received
State Use Only

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

RECEIVED
AUG 15 2007
Water Monitoring, Assessment & Protection Division

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Water Monitoring, Assessment & Protection Division

I. OWNERSHIP OF UST (S)

Beaufort Military Complex Family Housing		
Owner Name (Corporation, Individual, Public Agency, Other)		
1510 Laurel Bay Blvd.		
Mailing Address		
Beaufort	SC	29906
City	State	Zip Code
843	379-3305	Kyle Broadfoot
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A		
Permit I.D. #		
Actus LEND LEASE Construction		
Facility Name or Company Site Identifier		
1510 Laurel Bay Blvd.		
Street Address or State Road (as applicable)		
Beaufort, SC	29906	Beaufort
City	ZIP	County

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

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
#2 DIESEL					
350g.					
steel					
N					
N					
Removed					
8/14/06					
N					
N					

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

Recycling - Scrap Steel

- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)

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

VI. PIPING INFORMATION

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Steel					
N/A					
-0-					
Electra Pump					
N					
✓					

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

VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

VIII. SITE CONDITIONS

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

IX. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number DW: 84009002

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1		S				A. MANUEY	ND
2		S				A. MANUEY	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.		
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)								

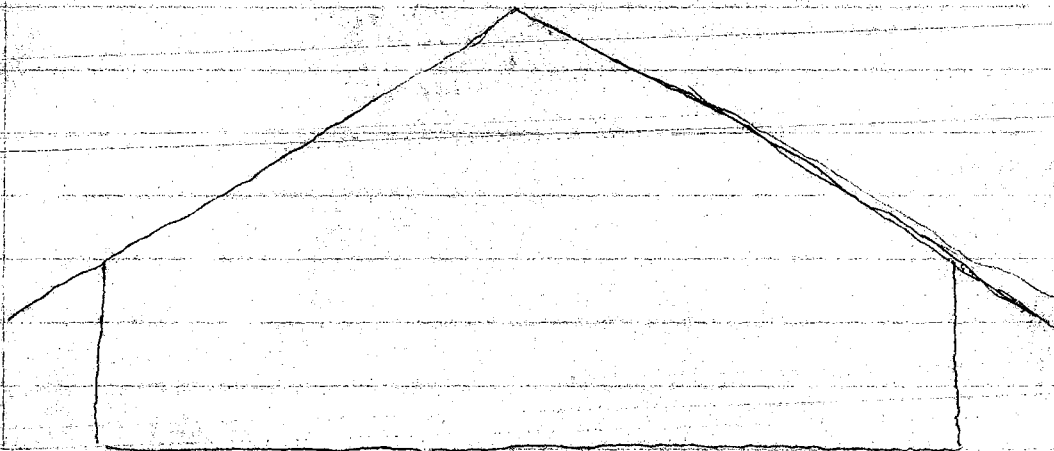
SUMMARY OF ANALYSIS RESULTS (cont'd)

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)anthracen e	10				
EDB	.05				
1,2-DCA	.05				
Lead	Site specific				

441 Elderberry



size of tank 5ft

length of hole 9ft 2in

depth " " 6ft

width of " " 6ft 1in

house to center of tank - 4ft 4in

441 Elderberry



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)

August 25, 2006

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

Work Order: OPH0362
Project Name: LAUREL BAY
Project Number: EP 2362
Date Received: 08/18/06

Attn: JOHN MAHONEY

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
441-01 BOTTOM	OPH0362-01	08/14/06 10:15
441-02 SIDE	OPH0362-02	08/14/06 10:15
143 LBB-01 BOTTOM	OPH0362-03	08/14/06 14:00
143 LBB-02 SIDE	OPH0362-04	08/14/06 14:00
143 LBB-03 BOTTOM	OPH0362-05	08/14/06 14:30
143 LBB-04 SIDE	OPH0362-06	08/14/06 14:30
270 BIRCH-01 BOTTOM	OPH0362-07	08/15/06 08:45
270 BIRCH-02 SIDE	OPH0362-08	08/15/06 08:50
201 BALSAM-01 BOTTOM	OPH0362-09	08/15/06 13:40
201 BALSAM-02 SIDE	OPH0362-10	08/15/06 13:45
1468 CARDINAL 01 BOTTOM	OPH0362-11	08/16/06 09:25
1468 CARDINAL 02 SIDE	OPH0362-12	08/16/06 09:25
1472 CARDINAL 01 BOTTOM	OPH0362-13	08/16/06 13:30
1472 CARDINAL 02 SIDE	OPH0362-14	08/16/06 14:00

Samples were received into laboratory at a temperature of 5.00 °C.

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

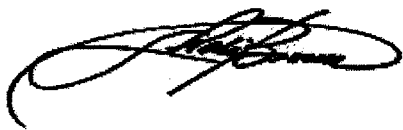
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Results are reported on a wet weight basis unless otherwise noted

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

South Carolina Certification Number: 96012001

Approved By:



TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 441-01 BOTTOM - Lab Number: OPH0362-01 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	85.5		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	43.0	RL2,U	ug/kg dry	43.0	118	250	08/18/06 17:12	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	1480		ug/kg dry	49.7	118	250	08/18/06 17:12	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	15600		ug/kg dry	64.9	118	250	08/18/06 17:12	JLS	EPA 8260B	6H21019
108-88-3	Toluene	127		ug/kg dry	102	118	250	08/18/06 17:12	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	4530		ug/kg dry	61.0	118	250	08/18/06 17:12	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		99 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		103 %									
Surrogate: Dibromofluoromethane (55-145%)		102 %									
Surrogate: Toluene-d8 (80-117%)		102 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	86.5	U	ug/kg dry	86.5	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	114		ug/kg dry	114	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	7410		ug/kg dry	623	1950	10	08/25/06 09:17	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	242	I	ug/kg dry	211	1950	10	08/24/06 18:52	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	20.6	U	ug/kg dry	20.6	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	20.6	U	ug/kg dry	20.6	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	20.3	U	ug/kg dry	20.3	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	24.0	U	ug/kg dry	24.0	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	22700		ug/kg dry	980	1950	10	08/25/06 09:17	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	23.4	U	ug/kg dry	23.4	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	25.6	U	ug/kg dry	25.6	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	28.1	U	ug/kg dry	28.1	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	1350		ug/kg dry	76.4	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	25.3	U	ug/kg dry	25.3	195	1	08/24/06 18:52	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	34000		ug/kg dry	833	1950	10	08/25/06 09:17	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	5880		ug/kg dry	784	1950	10	08/24/06 18:52	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	7320		ug/kg dry	461	1950	10	08/25/06 09:17	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	511	I	ug/kg dry	397	1950	10	08/24/06 18:52	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		67 %									
Surrogate: Nitrobenzene-d5 (19-111%)		93 %									
Surrogate: Terphenyl-d14 (44-171%)		35 %	J1								

LABORATORY REPORT

Sample ID: 441-02 SIDE - Lab Number: OPH0362-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	86.2		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	47.5	RL2,U	ug/kg dry	47.5	130	250	08/18/06 17:29	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	781		ug/kg dry	54.9	130	250	08/18/06 17:29	JLS	EPA 8260B	6H21019

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT
Sample ID: 441-02 SIDE - Lab Number: OPH0362-02 - 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	10200		ug/kg dry	71.6	130	250	08/18/06 17:29	JLS	EPA 8260B	6H21019
108-88-3	Toluene	117	I	ug/kg dry	112	130	250	08/18/06 17:29	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	1480		ug/kg dry	67.4	130	250	08/18/06 17:29	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		98 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		108 %									
Surrogate: Dibromofluoromethane (55-145%)		101 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	85.8	U	ug/kg dry	85.8	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	113	U	ug/kg dry	113	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	12800		ug/kg dry	618	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	619		ug/kg dry	21.0	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	454		ug/kg dry	20.4	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	463		ug/kg dry	20.4	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	20.1	U	ug/kg dry	20.1	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	23.8	U	ug/kg dry	23.8	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	36100		ug/kg dry	973	1940	10	08/25/06 10:42	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	874	I	ug/kg dry	232	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	25.4	U	ug/kg dry	25.4	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	27.9	U	ug/kg dry	27.9	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	75.8	U	ug/kg dry	75.8	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	25.1	U	ug/kg dry	25.1	194	1	08/24/06 19:20	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	51200		ug/kg dry	826	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	9560		ug/kg dry	778	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	12700		ug/kg dry	457	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	2010		ug/kg dry	394	1940	10	08/24/06 19:20	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		80 %									
Surrogate: Nitrobenzene-d5 (19-111%)		57 %									
Surrogate: Terphenyl-d14 (44-171%)		90 %									

LABORATORY REPORT
Sample ID: 143 LBB-01 BOTTOM - Lab Number: OPH0362-03 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	82.4		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.164	U	ug/kg dry	0.164	0.449	1	08/18/06 13:50	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	2.24		ug/kg dry	0.190	0.449	1	08/18/06 13:50	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	12.2		ug/kg dry	0.248	0.449	1	08/18/06 13:50	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.388	U	ug/kg dry	0.388	0.449	1	08/18/06 13:50	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.512		ug/kg dry	0.233	0.449	1	08/18/06 13:50	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		111 %									

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 143 LBB-01 BOTTOM - Lab Number: OPH0362-03 - 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%)	106 %									
	Surrogate: Dibromofluoromethane (55-145%)	106 %									
	Surrogate: Toluene-d8 (80-117%)	104 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	89.8	U	ug/kg dry	89.8	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	119	U	ug/kg dry	119	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	64.6	U	ug/kg dry	64.6	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	21.9	U	ug/kg dry	21.9	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	21.3	U	ug/kg dry	21.3	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	21.3	U	ug/kg dry	21.3	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	21.0	U	ug/kg dry	21.0	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	24.9	U	ug/kg dry	24.9	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	102	U	ug/kg dry	102	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	24.2	U	ug/kg dry	24.2	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	26.6	U	ug/kg dry	26.6	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	29.2	U	ug/kg dry	29.2	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	79.3	U	ug/kg dry	79.3	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	26.2	U	ug/kg dry	26.2	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	86.4	U	ug/kg dry	86.4	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	81.4	U	ug/kg dry	81.4	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	47.8	U	ug/kg dry	47.8	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	41.2	U	ug/kg dry	41.2	203	1	08/24/06 19:48	LCS	EPA 8270C	6H22026
	Surrogate: 2-Fluorobiphenyl (24-121%)	87 %									
	Surrogate: Nitrobenzene-d5 (19-111%)	78 %									
	Surrogate: Terphenyl-d14 (44-171%)	94 %									

LABORATORY REPORT

Sample ID: 143 LBB-02 SIDE - Lab Number: OPH0362-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	89.8		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.178	U	ug/kg dry	0.178	0.487	1	08/18/06 14:10	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.206	U	ug/kg dry	0.206	0.487	1	08/18/06 14:10	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.269	U	ug/kg dry	0.269	0.487	1	08/18/06 14:10	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.420	U	ug/kg dry	0.420	0.487	1	08/18/06 14:10	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.253	U	ug/kg dry	0.253	0.487	1	08/18/06 14:10	JLS	EPA 8260B	6H21019
	Surrogate: 1,2-Dichloroethane-d4 (73-137%)	113 %									
	Surrogate: 4-Bromofluorobenzene (59-118%)	104 %									
	Surrogate: Dibromofluoromethane (55-145%)	105 %									
	Surrogate: Toluene-d8 (80-117%)	103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 143 LBB-02 SIDE - Lab Number: OPH0362-04 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	82.4	U	ug/kg dry	82.4	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	109	U	ug/kg dry	109	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	59.3	U	ug/kg dry	59.3	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	20.1	U	ug/kg dry	20.1	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	19.6	U	ug/kg dry	19.6	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	19.6	U	ug/kg dry	19.6	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	19.3	U	ug/kg dry	19.3	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	22.9	U	ug/kg dry	22.9	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	93.4	U	ug/kg dry	93.4	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	22.2	U	ug/kg dry	22.2	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	24.4	U	ug/kg dry	24.4	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	26.7	U	ug/kg dry	26.7	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	72.8	U	ug/kg dry	72.8	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	24.1	U	ug/kg dry	24.1	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	79.3	U	ug/kg dry	79.3	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	74.7	U	ug/kg dry	74.7	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	43.9	U	ug/kg dry	43.9	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	37.8	U	ug/kg dry	37.8	186	1	08/24/06 20:16	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		102 %									
Surrogate: Nitrobenzene-d5 (19-111%)		94 %									
Surrogate: Terphenyl-d14 (44-171%)		114 %									

LABORATORY REPORT

Sample ID: 143 LBB-03 BOTTOM - Lab Number: OPH0362-05 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	86.3		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.169	U	ug/kg dry	0.169	0.461	1	08/18/06 14:30	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.195	U	ug/kg dry	0.195	0.461	1	08/18/06 14:30	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.254	U	ug/kg dry	0.254	0.461	1	08/18/06 14:30	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.398	U	ug/kg dry	0.398	0.461	1	08/18/06 14:30	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.239	U	ug/kg dry	0.239	0.461	1	08/18/06 14:30	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		111 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		103 %									
Surrogate: Dibromofluoromethane (55-145%)		104 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	85.7	U	ug/kg dry	85.7	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	113	U	ug/kg dry	113	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	61.7	U	ug/kg dry	61.7	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	21.0	U	ug/kg dry	21.0	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 143 LBB-03 BOTTOM - Lab Number: OPH0362-05 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
205-99-2	Benzo (b) fluoranthene	20.4	U	ug/kg dry	20.4	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	20.4	U	ug/kg dry	20.4	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	20.1	U	ug/kg dry	20.1	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	23.8	U	ug/kg dry	23.8	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	97.1	U	ug/kg dry	97.1	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	23.2	U	ug/kg dry	23.2	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	25.4	U	ug/kg dry	25.4	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	27.8	U	ug/kg dry	27.8	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	75.7	U	ug/kg dry	75.7	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	25.1	U	ug/kg dry	25.1	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	82.5	U	ug/kg dry	82.5	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	77.7	U	ug/kg dry	77.7	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	45.6	U	ug/kg dry	45.6	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	39.3	U	ug/kg dry	39.3	194	1	08/24/06 20:44	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		91 %									
Surrogate: Nitrobenzene-d5 (19-111%)		82 %									
Surrogate: Terphenyl-d14 (44-171%)		122 %									

LABORATORY REPORT

Sample ID: 143 LBB-04 SIDE - Lab Number: OPH0362-06 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	92.6		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21005
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.181	U	ug/kg dry	0.181	0.495	1	08/18/06 14:51	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.210	U	ug/kg dry	0.210	0.495	1	08/18/06 14:51	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.274	U	ug/kg dry	0.274	0.495	1	08/18/06 14:51	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.428	U	ug/kg dry	0.428	0.495	1	08/18/06 14:51	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.257	U	ug/kg dry	0.257	0.495	1	08/18/06 14:51	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		117 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		104 %									
Surrogate: Dibromofluoromethane (55-145%)		107 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	79.9	U	ug/kg dry	79.9	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	105	U	ug/kg dry	105	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	57.5	U	ug/kg dry	57.5	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	19.5	U	ug/kg dry	19.5	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	19.0	U	ug/kg dry	19.0	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	19.0	U	ug/kg dry	19.0	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	18.7	U	ug/kg dry	18.7	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	22.2	U	ug/kg dry	22.2	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT
Sample ID: 143 LBB-04 SIDE - Lab Number: OPH0362-06 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
90-12-0	1-Methylnaphthalene	90.5	U	ug/kg dry	90.5	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	21.6	U	ug/kg dry	21.6	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	23.7	U	ug/kg dry	23.7	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	25.9	U	ug/kg dry	25.9	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	70.6	U	ug/kg dry	70.6	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	23.3	U	ug/kg dry	23.3	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	76.9	U	ug/kg dry	76.9	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	72.4	U	ug/kg dry	72.4	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	42.5	U	ug/kg dry	42.5	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	36.6	U	ug/kg dry	36.6	180	1	08/24/06 21:12	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		65 %									
Surrogate: Nitrobenzene-d5 (19-111%)		75 %									
Surrogate: Terphenyl-d14 (44-171%)		124 %									

LABORATORY REPORT
Sample ID: 270 BIRCH-01 BOTTOM - Lab Number: OPH0362-07 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	93.8		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.206	U	ug/kg dry	0.206	0.562	1	08/18/06 15:13	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.238	U	ug/kg dry	0.238	0.562	1	08/18/06 15:13	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.311	U	ug/kg dry	0.311	0.562	1	08/18/06 15:13	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.486	U	ug/kg dry	0.486	0.562	1	08/18/06 15:13	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.292	U	ug/kg dry	0.292	0.562	1	08/18/06 15:13	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		112 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		102 %									
Surrogate: Dibromofluoromethane (55-145%)		104 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	78.9	U	ug/kg dry	78.9	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	104	U	ug/kg dry	104	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	56.8	U	ug/kg dry	56.8	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	19.3	U	ug/kg dry	19.3	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	18.7	U	ug/kg dry	18.7	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	18.7	U	ug/kg dry	18.7	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	18.5	U	ug/kg dry	18.5	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	21.9	U	ug/kg dry	21.9	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	89.4	U	ug/kg dry	89.4	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	21.3	U	ug/kg dry	21.3	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	23.4	U	ug/kg dry	23.4	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	25.6	U	ug/kg dry	25.6	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 270 BIRCH-01 BOTTOM - Lab Number: OPH0362-07 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
86-73-7	Fluorene	69.7	U	ug/kg dry	69.7	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	23.0	U	ug/kg dry	23.0	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	75.9	U	ug/kg dry	75.9	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	71.5	U	ug/kg dry	71.5	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	42.0	U	ug/kg dry	42.0	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	36.2	U	ug/kg dry	36.2	178	1	08/24/06 21:40	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		93 %									
Surrogate: Nitrobenzene-d5 (19-111%)		88 %									
Surrogate: Terphenyl-d14 (44-171%)		130 %									

LABORATORY REPORT

Sample ID: 270 BIRCH-02 SIDE - Lab Number: OPH0362-08 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	95.2		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.191	U	ug/kg dry	0.191	0.522	1	08/18/06 15:34	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.221	U	ug/kg dry	0.221	0.522	1	08/18/06 15:34	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.288	U	ug/kg dry	0.288	0.522	1	08/18/06 15:34	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.451	U	ug/kg dry	0.451	0.522	1	08/18/06 15:34	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.271	U	ug/kg dry	0.271	0.522	1	08/18/06 15:34	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		111 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		99 %									
Surrogate: Dibromofluoromethane (55-145%)		106 %									
Surrogate: Toluene-d8 (80-117%)		101 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	77.7	U	ug/kg dry	77.7	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	103	U	ug/kg dry	103	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	55.9	U	ug/kg dry	55.9	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	19.0	U	ug/kg dry	19.0	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	18.5	U	ug/kg dry	18.5	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	18.5	U	ug/kg dry	18.5	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	18.2	U	ug/kg dry	18.2	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	21.6	U	ug/kg dry	21.6	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	88.1	U	ug/kg dry	88.1	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	21.0	U	ug/kg dry	21.0	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	23.0	U	ug/kg dry	23.0	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	25.2	U	ug/kg dry	25.2	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	68.7	U	ug/kg dry	68.7	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	22.7	U	ug/kg dry	22.7	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	74.8	U	ug/kg dry	74.8	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	70.4	U	ug/kg dry	70.4	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 270 BIRCH-02 SIDE - Lab Number: OPH0362-08 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
85-01-8	Phenanthrene	41.4	U	ug/kg dry	41.4	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	35.6	U	ug/kg dry	35.6	175	1	08/24/06 22:08	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		94 %									
Surrogate: Nitrobenzene-d5 (19-111%)		87 %									
Surrogate: Terphenyl-d14 (44-171%)		123 %									

LABORATORY REPORT

Sample ID: 201 BALSAM-01 BOTTOM - Lab Number: OPH0362-09 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	85.4		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	44.3	RL2,U	ug/kg dry	44.3	121	250	08/18/06 17:47	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	2370		ug/kg dry	51.2	121	250	08/18/06 17:47	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	16600		ug/kg dry	66.8	121	250	08/18/06 17:47	JLS	EPA 8260B	6H21019
108-88-3	Toluene	104	U	ug/kg dry	104	121	250	08/18/06 17:47	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	1810		ug/kg dry	62.8	121	250	08/18/06 17:47	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		101 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		107 %									
Surrogate: Dibromofluoromethane (55-145%)		101 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	2250		ug/kg dry	867	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	114	U	ug/kg dry	114	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	11200		ug/kg dry	624	1960	10	08/25/06 12:35	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	21.2	U	ug/kg dry	21.2	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	20.6	U	ug/kg dry	20.6	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	20.6	U	ug/kg dry	20.6	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	20.3	U	ug/kg dry	20.3	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	24.1	U	ug/kg dry	24.1	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	21500		ug/kg dry	982	1960	10	08/25/06 12:35	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	464	I	ug/kg dry	234	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	25.7	U	ug/kg dry	25.7	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	706	I	ug/kg dry	281	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	2490		ug/kg dry	76.5	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	25.3	U	ug/kg dry	25.3	196	1	08/24/06 22:36	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	25500		ug/kg dry	834	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	4220		ug/kg dry	785	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	11100		ug/kg dry	461	1960	10	08/25/06 12:35	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	1530	I	ug/kg dry	397	1960	10	08/24/06 22:36	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		85 %									
Surrogate: Nitrobenzene-d5 (19-111%)		39 %									

TestAmerica - Orlando, FL

Shali Brown

Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 201 BALSAM-01 BOTTOM - Lab Number: OPH0362-09 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.											
Surrogate: Terphenyl-d14 (44-171%)		83 %									

LABORATORY REPORT

Sample ID: 201 BALSAM-02 SIDE - Lab Number: OPH0362-10 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	91.6		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.161	U	ug/kg dry	0.161	0.440	1	08/18/06 15:55	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.186	U	ug/kg dry	0.186	0.440	1	08/18/06 15:55	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.414	I	ug/kg dry	0.243	0.440	1	08/18/06 15:55	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.380	U	ug/kg dry	0.380	0.440	1	08/18/06 15:55	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	0.229	U	ug/kg dry	0.229	0.440	1	08/18/06 15:55	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		116 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		98 %									
Surrogate: Dibromofluoromethane (55-145%)		106 %									
Surrogate: Toluene-d8 (80-117%)		99 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	80.8	U	ug/kg dry	80.8	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	107	U	ug/kg dry	107	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	58.1	U	ug/kg dry	58.1	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	519		ug/kg dry	19.7	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	219		ug/kg dry	19.2	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	228		ug/kg dry	19.2	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	833		ug/kg dry	18.9	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	923		ug/kg dry	22.4	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	91.5	U	ug/kg dry	91.5	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	577		ug/kg dry	21.8	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	23.9	U	ug/kg dry	23.9	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	26.2	U	ug/kg dry	26.2	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	71.4	U	ug/kg dry	71.4	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	718		ug/kg dry	23.6	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	77.7	U	ug/kg dry	77.7	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	73.2	U	ug/kg dry	73.2	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	43.0	U	ug/kg dry	43.0	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	37.0	U	ug/kg dry	37.0	182	1	08/24/06 23:04	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		94 %									
Surrogate: Nitrobenzene-d5 (19-111%)		79 %									
Surrogate: Terphenyl-d14 (44-171%)		78 %									

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 1468 CARDINAL 01 BOTTOM - Lab Number: OPH0362-11 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	96.6		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.221	U	ug/kg dry	0.221	0.603	1	08/18/06 16:16	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.458	I	ug/kg dry	0.255	0.603	1	08/18/06 16:16	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	2.23		ug/kg dry	0.333	0.603	1	08/18/06 16:16	JLS	EPA 8260B	6H21019
108-88-3	Toluene	2.64		ug/kg dry	0.521	0.603	1	08/18/06 16:16	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	4.25		ug/kg dry	0.313	0.603	1	08/18/06 16:16	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		116 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		101 %									
Surrogate: Dibromofluoromethane (55-145%)		106 %									
Surrogate: Toluene-d8 (80-117%)		102 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	76.6	U	ug/kg dry	76.6	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	101	U	ug/kg dry	101	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	55.1	U	ug/kg dry	55.1	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	547		ug/kg dry	18.7	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	283		ug/kg dry	18.2	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	295		ug/kg dry	18.2	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	17.9	U	ug/kg dry	17.9	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	238		ug/kg dry	21.3	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	86.8	U	ug/kg dry	86.8	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	769		ug/kg dry	20.7	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	22.7	U	ug/kg dry	22.7	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	1000		ug/kg dry	24.9	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	67.7	U	ug/kg dry	67.7	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	22.4	U	ug/kg dry	22.4	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	73.7	U	ug/kg dry	73.7	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	69.4	U	ug/kg dry	69.4	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	166	I	ug/kg dry	40.8	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	1310		ug/kg dry	35.1	173	1	08/24/06 23:32	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		96 %									
Surrogate: Nitrobenzene-d5 (19-111%)		88 %									
Surrogate: Terphenyl-d14 (44-171%)		117 %									

LABORATORY REPORT

Sample ID: 1468 CARDINAL 02 SIDE - Lab Number: OPH0362-12 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	72.2		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.256	U	ug/kg dry	0.256	0.698	1	08/18/06 16:37	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.489	I	ug/kg dry	0.295	0.698	1	08/18/06 16:37	JLS	EPA 8260B	6H21019

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 1468 CARDINAL 02 SIDE - Lab Number: OPH0362-12 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Volatile Organic Compounds by EPA Method 8260B - Cont.											
91-20-3	Naphthalene	0.386	U	ug/kg dry	0.386	0.698	1	08/18/06 16:37	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.963		ug/kg dry	0.603	0.698	1	08/18/06 16:37	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	5.92		ug/kg dry	0.363	0.698	1	08/18/06 16:37	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		115 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		81 %									
Surrogate: Dibromofluoromethane (55-145%)		107 %									
Surrogate: Toluene-d8 (80-117%)		92 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	102	U	ug/kg dry	102	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	135	U	ug/kg dry	135	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	73.8	U	ug/kg dry	73.8	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	25.0	U	ug/kg dry	25.0	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	24.3	U	ug/kg dry	24.3	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	24.3	U	ug/kg dry	24.3	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	24.0	U	ug/kg dry	24.0	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	28.5	U	ug/kg dry	28.5	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	116	U	ug/kg dry	116	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	27.7	U	ug/kg dry	27.7	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	30.4	U	ug/kg dry	30.4	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	33.3	U	ug/kg dry	33.3	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	90.5	U	ug/kg dry	90.5	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	29.9	U	ug/kg dry	29.9	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	98.6	U	ug/kg dry	98.6	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	92.9	U	ug/kg dry	92.9	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	54.6	U	ug/kg dry	54.6	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	47.0	U	ug/kg dry	47.0	231	1	08/25/06 00:00	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		97 %									
Surrogate: Nitrobenzene-d5 (19-111%)		86 %									
Surrogate: Terphenyl-d14 (44-171%)		127 %									

LABORATORY REPORT

Sample ID: 1472 CARDINAL 01 BOTTOM - Lab Number: OPH0362-13 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	82.0		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	45.4	RL2,U	ug/kg dry	45.4	124	250	08/18/06 18:04	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	586		ug/kg dry	52.5	124	250	08/18/06 18:04	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	5350		ug/kg dry	68.6	124	250	08/18/06 18:04	JLS	EPA 8260B	6H21019
108-88-3	Toluene	107	U	ug/kg dry	107	124	250	08/18/06 18:04	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	628		ug/kg dry	64.5	124	250	08/18/06 18:04	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		102 %									

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 1472 CARDINAL 01 BOTTOM - Lab Number: OPH0362-13 - 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%)		107 %									
Surrogate: Dibromofluoromethane (55-145%)		101 %									
Surrogate: Toluene-d8 (80-117%)		103 %									
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	3930		ug/kg dry	902	2040	10	08/25/06 00:28	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	119	U	ug/kg dry	119	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	15500		ug/kg dry	649	2040	10	08/25/06 00:28	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	126	I	ug/kg dry	22.0	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	21.4	U	ug/kg dry	21.4	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	21.4	U	ug/kg dry	21.4	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	21.1	U	ug/kg dry	21.1	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	25.1	U	ug/kg dry	25.1	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	102	U	ug/kg dry	102	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	24.4	U	ug/kg dry	24.4	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	26.7	U	ug/kg dry	26.7	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	29.3	U	ug/kg dry	29.3	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	79.7	U	ug/kg dry	79.7	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	26.4	U	ug/kg dry	26.4	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	60400		ug/kg dry	868	2040	10	08/25/06 13:31	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	14600		ug/kg dry	818	2040	10	08/25/06 13:31	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	15300		ug/kg dry	480	2040	10	08/25/06 00:28	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	41.4	U	ug/kg dry	41.4	204	1	08/25/06 00:28	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		32 %									
Surrogate: Nitrobenzene-d5 (19-111%)		*	JI,U								
Surrogate: Terphenyl-d14 (44-171%)		65 %									

LABORATORY REPORT

Sample ID: 1472 CARDINAL 02 SIDE - Lab Number: OPH0362-14 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
NA	% Solids	80.1		%	0.100	0.100	1	08/18/06 17:19	AKA	EPA 160.3	6H21006
Volatile Organic Compounds by EPA Method 8260B											
71-43-2	Benzene	0.184	U	ug/kg dry	0.184	0.502	1	08/18/06 16:54	JLS	EPA 8260B	6H21019
100-41-4	Ethylbenzene	0.462	I	ug/kg dry	0.212	0.502	1	08/18/06 16:54	JLS	EPA 8260B	6H21019
91-20-3	Naphthalene	0.277	U	ug/kg dry	0.277	0.502	1	08/18/06 16:54	JLS	EPA 8260B	6H21019
108-88-3	Toluene	0.452	I	ug/kg dry	0.433	0.502	1	08/18/06 16:54	JLS	EPA 8260B	6H21019
1330-20-7	Xylenes, total	1.21		ug/kg dry	0.261	0.502	1	08/18/06 16:54	JLS	EPA 8260B	6H21019
Surrogate: 1,2-Dichloroethane-d4 (73-137%)		114 %									
Surrogate: 4-Bromofluorobenzene (59-118%)		106 %									
Surrogate: Dibromofluoromethane (55-145%)		105 %									
Surrogate: Toluene-d8 (80-117%)		103 %									

Polynuclear Aromatic Hydrocarbons by EPA Method 8270

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

LABORATORY REPORT

Sample ID: 1472 CARDINAL 02 SIDE - Lab Number: OPH0362-14 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270											
83-32-9	Acenaphthene	92.4	U	ug/kg dry	92.4	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
208-96-8	Acenaphthylene	122	U	ug/kg dry	122	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
120-12-7	Anthracene	66.5	U	ug/kg dry	66.5	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
56-55-3	Benzo (a) anthracene	22.6	U	ug/kg dry	22.6	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
205-99-2	Benzo (b) fluoranthene	21.9	U	ug/kg dry	21.9	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
207-08-9	Benzo (k) fluoranthene	21.9	U	ug/kg dry	21.9	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
191-24-2	Benzo (g,h,i) perylene	21.6	U	ug/kg dry	21.6	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
50-32-8	Benzo (a) pyrene	25.7	U	ug/kg dry	25.7	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
90-12-0	1-Methylnaphthalene	1050	U	ug/kg dry	1050	2080	10	08/25/06 00:56	LCS	EPA 8270C	6H22026
218-01-9	Chrysene	24.9	U	ug/kg dry	24.9	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
53-70-3	Dibenz (a,h) anthracene	27.4	U	ug/kg dry	27.4	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
206-44-0	Fluoranthene	30.0	U	ug/kg dry	30.0	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
86-73-7	Fluorene	81.6	U	ug/kg dry	81.6	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
193-39-5	Indeno (1,2,3-cd) pyrene	27.0	U	ug/kg dry	27.0	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
91-57-6	2-Methylnaphthalene	889	U	ug/kg dry	889	2080	10	08/25/06 00:56	LCS	EPA 8270C	6H22026
91-20-3	Naphthalene	837	U	ug/kg dry	837	2080	10	08/25/06 00:56	LCS	EPA 8270C	6H22026
85-01-8	Phenanthrene	49.2	U	ug/kg dry	49.2	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
129-00-0	Pyrene	42.4	U	ug/kg dry	42.4	208	1	08/25/06 00:56	LCS	EPA 8270C	6H22026
Surrogate: 2-Fluorobiphenyl (24-121%)		27 %									
Surrogate: Nitrobenzene-d5 (19-111%)		46 %									
Surrogate: Terphenyl-d14 (44-171%)		16 %	J1								

Client: EPG, INC.
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Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

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Received: 08/18/06

SAMPLE EXTRACTION DATA

Parameter	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Method
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-01	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-02	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-03	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-04	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-05	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-06	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-07	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-08	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-09	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-10	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-11	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-12	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-13	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS
Polynuclear Aromatic Hydrocarbons by EPA Method 8270	OPH0362-14	30.0 g	1.0 mL	08/22/2006	YGM	EPA 3545 MS

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Project: LAUREL BAY
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Received: 08/18/06

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
General Chemistry Parameters					
% Solids	0.100	U	%	6H21005	6H21005-BLK1
% Solids	0.100	U	%	6H21006	6H21006-BLK1
Volatile Organic Compounds by EPA Method 8260B					
Benzene	0.183	U	ug/kg wet	6H21019	6H21019-BLK2
Benzene	0.183	U	ug/kg wet	6H21019	6H21019-BLK1
Ethylbenzene	0.212	U	ug/kg wet	6H21019	6H21019-BLK2
Ethylbenzene	0.212	U	ug/kg wet	6H21019	6H21019-BLK1
Naphthalene	0.276	U	ug/kg wet	6H21019	6H21019-BLK1
Naphthalene	0.276	U	ug/kg wet	6H21019	6H21019-BLK2
Toluene	0.432	U	ug/kg wet	6H21019	6H21019-BLK1
Toluene	0.432	U	ug/kg wet	6H21019	6H21019-BLK2
Xylenes, total	0.260	U	ug/kg wet	6H21019	6H21019-BLK1
Xylenes, total	0.260	U	ug/kg wet	6H21019	6H21019-BLK2
Surrogate: 1,2-Dichloroethane-d4	48.6		ug/kg wet	6H21019	6H21019-BLK1
Surrogate: 1,2-Dichloroethane-d4	50.1		ug/kg wet	6H21019	6H21019-BLK2
Surrogate: 4-Bromofluorobenzene	50.6		ug/kg wet	6H21019	6H21019-BLK2
Surrogate: 4-Bromofluorobenzene	50.0		ug/kg wet	6H21019	6H21019-BLK1
Surrogate: Dibromofluoromethane	50.9		ug/kg wet	6H21019	6H21019-BLK1
Surrogate: Dibromofluoromethane	51.0		ug/kg wet	6H21019	6H21019-BLK2
Surrogate: Toluene-d8	51.0		ug/kg wet	6H21019	6H21019-BLK2
Surrogate: Toluene-d8	51.2		ug/kg wet	6H21019	6H21019-BLK1
Polynuclear Aromatic Hydrocarbons by EPA Method 8270					
Acenaphthene	74.0	U	ug/kg wet	6H22026	6H22026-BLK1
Acenaphthylene	97.7	U	ug/kg wet	6H22026	6H22026-BLK1
Anthracene	53.2	U	ug/kg wet	6H22026	6H22026-BLK1
Benzo (a) anthracene	18.1	U	ug/kg wet	6H22026	6H22026-BLK1
Benzo (b) fluoranthene	17.6	U	ug/kg wet	6H22026	6H22026-BLK1
Benzo (k) fluoranthene	17.6	U	ug/kg wet	6H22026	6H22026-BLK1
Benzo (g,h,i) perylene	17.3	U	ug/kg wet	6H22026	6H22026-BLK1
Benzo (a) pyrene	20.6	U	ug/kg wet	6H22026	6H22026-BLK1
1-Methylnaphthalene	83.8	U	ug/kg wet	6H22026	6H22026-BLK1
Chrysene	20.0	U	ug/kg wet	6H22026	6H22026-BLK1
Dibenz (a,h) anthracene	21.9	U	ug/kg wet	6H22026	6H22026-BLK1
Fluoranthene	24.0	U	ug/kg wet	6H22026	6H22026-BLK1
Fluorene	65.4	U	ug/kg wet	6H22026	6H22026-BLK1
Indeno (1,2,3-cd) pyrene	21.6	U	ug/kg wet	6H22026	6H22026-BLK1
2-Methylnaphthalene	71.2	U	ug/kg wet	6H22026	6H22026-BLK1
Naphthalene	67.1	U	ug/kg wet	6H22026	6H22026-BLK1
Phenanthrene	39.4	U	ug/kg wet	6H22026	6H22026-BLK1
Pyrene	33.9	U	ug/kg wet	6H22026	6H22026-BLK1
Surrogate: 2-Fluorobiphenyl	2870		ug/kg wet	6H22026	6H22026-BLK1

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
Polynuclear Aromatic Hydrocarbons by EPA Method 8270					
Surrogate: Nitrobenzene-d5	2500		ug/kg wet	6H22026	6H22026-BLK1
Surrogate: Terphenyl-d14	3990		ug/kg wet	6H22026	6H22026-BLK1

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
General Chemistry Parameters								
% Solids	93.8	94.0		%	0.2	15.9	6H21006	OPH0362-07
% Solids	90.1	90.4		%	0.3	15.9	6H21005	OPH0361-01
Volatile Organic Compounds by EPA Method 8260B								
Benzene	<0.320	0.320	U	ug/kg dry		30	6H21019	OPH0363-02
Ethylbenzene	<0.370	0.370	U	ug/kg dry		30	6H21019	OPH0363-02
Naphthalene	<0.483	0.483	U	ug/kg dry		30	6H21019	OPH0363-02
Toluene	<0.755	0.755	U	ug/kg dry		30	6H21019	OPH0363-02
Xylenes, total	<0.454	0.454	U	ug/kg dry		30	6H21019	OPH0363-02
Surrogate: 1,2-Dichloroethane-d4		58.3		ug/kg dry			6H21019	OPH0363-02
Surrogate: 4-Bromofluorobenzene		50.6		ug/kg dry			6H21019	OPH0363-02
Surrogate: Dibromofluoromethane		52.6		ug/kg dry			6H21019	OPH0363-02
Surrogate: Toluene-d8		51.1		ug/kg dry			6H21019	OPH0363-02

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PROJECT QUALITY CONTROL DATA

LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Q.C. Batch
General Chemistry Parameters							
% Solids	380	382		%	101	90 - 110	6H21006
% Solids	380	382		%	101	90 - 110	6H21005
Volatile Organic Compounds by EPA Method 8260B							
Benzene	50.0	48.4		ug/kg wet	97	84 - 113	6H21019
Benzene	50.0	47.0		ug/kg wet	94	84 - 113	6H21019
Ethylbenzene	50.0	47.2		ug/kg wet	94	85 - 124	6H21019
Ethylbenzene	50.0	45.0		ug/kg wet	90	85 - 124	6H21019
Naphthalene	50.0	55.1		ug/kg wet	110	90 - 137	6H21019
Naphthalene	50.0	53.8		ug/kg wet	108	90 - 137	6H21019
Toluene	50.0	48.8		ug/kg wet	98	82 - 112	6H21019
Toluene	50.0	49.0		ug/kg wet	98	82 - 112	6H21019
Xylenes, total	150	137		ug/kg wet	91	84 - 127	6H21019
Xylenes, total	150	144		ug/kg wet	96	84 - 127	6H21019
Surrogate: 1,2-Dichloroethane-d4	50.0	51.7		ug/kg wet	103	73 - 137	6H21019
Surrogate: 1,2-Dichloroethane-d4	50.0	50.2		ug/kg wet	100	73 - 137	6H21019
Surrogate: 4-Bromofluorobenzene	50.0	50.7		ug/kg wet	101	59 - 118	6H21019
Surrogate: 4-Bromofluorobenzene	50.0	51.2		ug/kg wet	102	59 - 118	6H21019
Surrogate: Dibromofluoromethane	50.0	51.1		ug/kg wet	102	55 - 145	6H21019
Surrogate: Dibromofluoromethane	50.0	51.4		ug/kg wet	103	55 - 145	6H21019
Surrogate: Toluene-d8	50.0	52.0		ug/kg wet	104	80 - 117	6H21019
Surrogate: Toluene-d8	50.0	51.3		ug/kg wet	103	80 - 117	6H21019
Polynuclear Aromatic Hydrocarbons by EPA Method 8270							
Acenaphthene	3330	2880		ug/kg wet	86	51 - 124	6H22026
Acenaphthylene	3330	3430		ug/kg wet	103	58 - 124	6H22026
Anthracene	3330	3190		ug/kg wet	96	61 - 122	6H22026
Benzo (a) anthracene	3330	2940		ug/kg wet	88	51 - 139	6H22026
Benzo (b) fluoranthene	3330	2610		ug/kg wet	78	57 - 129	6H22026
Benzo (k) fluoranthene	3330	2860		ug/kg wet	86	53 - 127	6H22026
Benzo (g,h,i) perylene	3330	3560		ug/kg wet	107	34 - 123	6H22026
Benzo (a) pyrene	3330	2840		ug/kg wet	85	65 - 109	6H22026
1-Methylnaphthalene	3330	2700		ug/kg wet	81	18 - 115	6H22026
Chrysene	3330	2960		ug/kg wet	89	55 - 130	6H22026
Dibenz (a,h) anthracene	3330	3630		ug/kg wet	109	48 - 125	6H22026
Fluoranthene	3330	2810		ug/kg wet	84	58 - 129	6H22026
Fluorene	3330	3360		ug/kg wet	101	61 - 128	6H22026
Indeno (1,2,3-cd) pyrene	3330	3740		ug/kg wet	112	44 - 126	6H22026
2-Methylnaphthalene	3330	2940		ug/kg wet	88	20 - 125	6H22026
Naphthalene	3330	2690		ug/kg wet	81	23 - 118	6H22026
Phenanthrene	3330	3140		ug/kg wet	94	61 - 120	6H22026

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Q.C. Batch
Polynuclear Aromatic Hydrocarbons by EPA Method 8270							
Pyrene	3330	3550		ug/kg wet	107	45 - 141	6H22026
Surrogate: 2-Fluorobiphenyl	3330	3450		ug/kg wet	104	24 - 121	6H22026
Surrogate: Nitrobenzene-d5	3330	2870		ug/kg wet	86	19 - 111	6H22026
Surrogate: Terphenyl-d14	3330	3760		ug/kg wet	113	44 - 171	6H22026

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

PROJECT QUALITY CONTROL DATA

Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked
Volatile Organic Compounds by EPA Method 8260B									
Benzene	<0.183	15.0		ug/kg dry	50.0	30	18 - 126	6H21019	OPH0363-01
Benzene	<0.183	46.0		ug/kg dry	50.0	92	18 - 126	6H21019	OPH0354-01
Ethylbenzene	<0.212	8.45		ug/kg dry	50.0	17	12 - 120	6H21019	OPH0363-01
Ethylbenzene	<0.212	44.7		ug/kg dry	50.0	89	12 - 120	6H21019	OPH0354-01
Naphthalene	<0.276	6.17		ug/kg dry	50.0	12	10 - 125	6H21019	OPH0363-01
Naphthalene	<0.276	37.8		ug/kg dry	50.0	76	10 - 125	6H21019	OPH0354-01
Toluene	<0.432	12.3		ug/kg dry	50.0	25	10 - 130	6H21019	OPH0363-01
Toluene	0.257	46.7		ug/kg dry	50.0	93	10 - 130	6H21019	OPH0354-01
Xylenes, total	<0.260	24.4		ug/kg dry	150	16	10 - 126	6H21019	OPH0363-01
Xylenes, total	<0.260	134		ug/kg dry	150	89	10 - 126	6H21019	OPH0354-01
Surrogate: 1,2-Dichloroethane-d4		51.0		ug/kg dry	50.0	102	73 - 137	6H21019	OPH0354-01
Surrogate: 1,2-Dichloroethane-d4		62.5		ug/kg dry	50.0	125	73 - 137	6H21019	OPH0363-01
Surrogate: 4-Bromofluorobenzene		49.3		ug/kg dry	50.0	99	59 - 118	6H21019	OPH0354-01
Surrogate: 4-Bromofluorobenzene		51.2		ug/kg dry	50.0	102	59 - 118	6H21019	OPH0363-01
Surrogate: Dibromofluoromethane		51.4		ug/kg dry	50.0	103	55 - 145	6H21019	OPH0354-01
Surrogate: Dibromofluoromethane		54.2		ug/kg dry	50.0	108	55 - 145	6H21019	OPH0363-01
Surrogate: Toluene-d8		52.0		ug/kg dry	50.0	104	80 - 117	6H21019	OPH0363-01
Surrogate: Toluene-d8		51.2		ug/kg dry	50.0	102	80 - 117	6H21019	OPH0354-01
Polynuclear Aromatic Hydrocarbons by EPA Method 8270									
Acenaphthene	<76.6	2170		ug/kg dry	3450	63	40 - 125	6H22026	OPH0362-11
Acenaphthylene	<101	2440		ug/kg dry	3450	71	44 - 125	6H22026	OPH0362-11
Anthracene	<55.1	2340		ug/kg dry	3450	68	53 - 121	6H22026	OPH0362-11
Benzo (a) anthracene	547	2400		ug/kg dry	3450	54	46 - 135	6H22026	OPH0362-11
Benzo (b) fluoranthene	283	2060		ug/kg dry	3450	52	44 - 136	6H22026	OPH0362-11
Benzo (k) fluoranthene	295	2050		ug/kg dry	3450	51	43 - 131	6H22026	OPH0362-11
Benzo (g,h,i) perylene	<17.9	2810		ug/kg dry	3450	81	34 - 123	6H22026	OPH0362-11
Benzo (a) pyrene	238	2120		ug/kg dry	3450	55	51 - 115	6H22026	OPH0362-11
1-Methylnaphthalene	<86.8	2040		ug/kg dry	3450	59	11 - 112	6H22026	OPH0362-11
Chrysene	769	2440		ug/kg dry	3450	48	48 - 126	6H22026	OPH0362-11
Dibenz (a,h) anthracene	<22.7	2740		ug/kg dry	3450	79	38 - 119	6H22026	OPH0362-11
Fluoranthene	1000	2540		ug/kg dry	3450	45	33 - 138	6H22026	OPH0362-11
Fluorene	<67.7	2340		ug/kg dry	3450	68	48 - 128	6H22026	OPH0362-11
Indeno (1,2,3-cd) pyrene	<22.4	2900		ug/kg dry	3450	84	37 - 117	6H22026	OPH0362-11
2-Methylnaphthalene	<73.7	2220		ug/kg dry	3450	64	11 - 122	6H22026	OPH0362-11
Naphthalene	<69.4	2040		ug/kg dry	3450	59	15 - 116	6H22026	OPH0362-11
Phenanthrene	166	2380		ug/kg dry	3450	64	52 - 123	6H22026	OPH0362-11
Pyrene	1310	3150		ug/kg dry	3450	53	31 - 155	6H22026	OPH0362-11
Surrogate: 2-Fluorobiphenyl		2630		ug/kg dry	3450	76	24 - 121	6H22026	OPH0362-11
Surrogate: Nitrobenzene-d5		2120		ug/kg dry	3450	61	19 - 111	6H22026	OPH0362-11

TestAmerica - Orlando, FL
Shali Brown
Project Manager

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked
Polynuclear Aromatic Hydrocarbons by EPA Method 8270									
Surrogate: Terphenyl-d14		2960		ug/kg dry	3450	86	44 - 171	6H22026	OPH0362-11

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
Volatile Organic Compounds by EPA Method 8260B										
Benzene	<0.183	35.4		ug/kg dry	50.0	71	26	30	6H21019	OPH0354-01
Ethylbenzene	<0.212	33.7		ug/kg dry	50.0	67	28	30	6H21019	OPH0354-01
Naphthalene	<0.276	29.5		ug/kg dry	50.0	59	25	30	6H21019	OPH0354-01
Toluene	0.279	36.0		ug/kg dry	50.0	71	26	30	6H21019	OPH0354-01
Xylenes, total	<0.260	103		ug/kg dry	150	69	26	30	6H21019	OPH0354-01
Surrogate: 1,2-Dichloroethane-d4		50.7		ug/kg dry	50.0	101			6H21019	OPH0354-01
Surrogate: 4-Bromofluorobenzene		49.5		ug/kg dry	50.0	99			6H21019	OPH0354-01
Surrogate: Dibromofluoromethane		50.8		ug/kg dry	50.0	102			6H21019	OPH0354-01
Surrogate: Toluene-d8		50.8		ug/kg dry	50.0	102			6H21019	OPH0354-01
Polynuclear Aromatic Hydrocarbons by EPA Method 8270										
Acenaphthene	<76.6	2830		ug/kg dry	3450	82	26	60	6H22026	OPH0362-11
Acenaphthylene	<101	3270		ug/kg dry	3450	95	29	51	6H22026	OPH0362-11
Anthracene	<55.1	3100		ug/kg dry	3450	90	28	60	6H22026	OPH0362-11
Benzo (a) anthracene	547	3160		ug/kg dry	3450	76	27	46	6H22026	OPH0362-11
Benzo (b) fluoranthene	283	2690		ug/kg dry	3450	70	27	60	6H22026	OPH0362-11
Benzo (k) fluoranthene	295	2660		ug/kg dry	3450	69	26	60	6H22026	OPH0362-11
Benzo (g,h,i) perylene	<17.9	3780		ug/kg dry	3450	110	29	38	6H22026	OPH0362-11
Benzo (a) pyrene	238	2740		ug/kg dry	3450	73	26	48	6H22026	OPH0362-11
1-Methylnaphthalene	<86.8	2580		ug/kg dry	3450	75	23	60	6H22026	OPH0362-11
Chrysene	769	3230		ug/kg dry	3450	71	28	36	6H22026	OPH0362-11
Dibenz (a,h) anthracene	<22.7	3700		ug/kg dry	3450	107	30	60	6H22026	OPH0362-11
Fluoranthene	1000	3370		ug/kg dry	3450	69	28	63	6H22026	OPH0362-11
Fluorene	<67.7	3260		ug/kg dry	3450	94	33	49	6H22026	OPH0362-11
Indeno (1,2,3-cd) pyrene	<22.4	3840		ug/kg dry	3450	111	28	60	6H22026	OPH0362-11
2-Methylnaphthalene	<73.7	2810		ug/kg dry	3450	81	23	71	6H22026	OPH0362-11
Naphthalene	<69.4	2570		ug/kg dry	3450	74	23	81	6H22026	OPH0362-11
Phenanthrene	166	3250		ug/kg dry	3450	89	31	60	6H22026	OPH0362-11
Pyrene	1310	4130		ug/kg dry	3450	82	27	90	6H22026	OPH0362-11
Surrogate: 2-Fluorobiphenyl		3300		ug/kg dry	3450	96			6H22026	OPH0362-11
Surrogate: Nitrobenzene-d5		2570		ug/kg dry	3450	74			6H22026	OPH0362-11
Surrogate: Terphenyl-d14		3710		ug/kg dry	3450	108			6H22026	OPH0362-11

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

Work Order: OPH0362
Project: LAUREL BAY
Project Number: EP 2362

Sampled: 08/14/06-08/16/06
Received: 08/18/06

CERTIFICATION SUMMARY

TestAmerica - Orlando, FL

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

DATA QUALIFIERS AND DEFINITIONS

- I Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
Concentrations in this range are estimated.
- J1 Surrogate recovery limits have been exceeded.
- RL2 Reporting limit raised due to high concentrations of hydrocarbons.
- U The compound was analyzed for but not detected

ADDITIONAL COMMENTS

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

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

TestAmerica

ANALYTICAL TESTING CORPORATION

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

Client: EPG, INC.

Project: OPH0362

Shipped By: Fed Ex

Tracking Number: 858282354468

Cooler Received On: 08/18/06 09:20

And Opened On (Date/time): 8/18/06

Received By: Jessica Batura

Logged in by: Jessica Batura

Were custody seals on the outside of cooler? YES ☐ NO ☒ If Yes # ☐ Location ☐

Were custody seals intact? YES ☐ NO ☐ N/A ☒ (no seals present)

Chain of Custody Complete? YES ☒ NO ☐ If No Discrepancy ☐

Cooler Temperature When Opened: 5.00 Degrees Celsius

Temperature Blank Included: YES ☐ NO ☒

Packing Material: Bubblewrap ☒ NONE ☐ Other: ☐

Received on Ice: YES ☒ NO ☐ Other: ☐ Total # Of Containers: 20 # Vials 42

Any Bottles Broken? YES ☐ NO ☒ If Yes Which One(s)? ☐

Any Missing Samples? YES ☐ NO ☒ If Yes Which One(s)? ☐

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

Of Containers Unpreserved between 6 and 8? 48, 14 methanol

Any Air Bubbles in VOA Vials? YES ☐ NO ☒ N/A ☐ (no VOA vials received)

Was there enough sample shipped in each container? YES ☒ NO ☐

Correct Preservatives Used? YES ☒ NO ☐ If No, please explain: ☐

Project Manager: Shali Brown

Corrective Actions Taken

1468 cardinal on side - 1 jar had no sample
date or time.

1472 cardinal on bottom - 1 jar had no sample
time.

TestAmerica

BP H0362 page 1 of 2

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

Client Name EPG Client #: 2411

Address: _____

City/State/Zip Code: _____

Project Manager: John Mahoney

Telephone Number: _____ Fax: _____

Sampler Name: (Print Name) Al Manucy

Sampler Signature: [Signature]

Project Name: LAUREL BAY

Project #: EP 2362

Site/Location ID: _____ State: _____

Report To: _____

Invoice To: _____

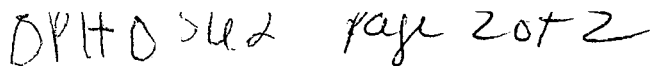
Quote #: _____ PO#: _____

TAT ☒ Standard ☐ Rush (surcharges may apply)		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										Analyze For:										QC Deliverables																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Date Needed: _____							HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)											☐ None ☒ Level 2 (Batch QC) ☐ Level 3 ☐ Level 4 Other: _____																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Special Instructions: Report in dry weight

LABORATORY COMMENTS:
Init Lab Temp: _____
Rec Lab Temp: 50
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
B582 8235 4468
Method of Shipment: Fed Ex to TA - Okandi

Relinquished By: <u>A. Manucy</u>	Date: <u>8/17</u>	Time: <u>12:15</u>	Received By: <u>[Signature]</u>	Date: <u>8/17/96</u>	Time: <u>12:15</u>
Relinquished By: <u>[Signature]</u>	Date: <u>8/17</u>	Time: <u>1730</u>	Received By: <u>[Signature]</u>	Date: <u>8/18</u>	Time: <u>9:20</u>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____



Compliance Monitoring

EPG

2411

Project Name:

LAUREL BAY

Project #:

EP 2362

J. Mahoney

Site/Location ID:

State:

Fax:

Report To:

Al Manucy

Invoice To:

[Signature]

Quote #:

PO#:

11
12
13
14

Appendix C
Laboratory Analytical Report - Initial Groundwater

ANALYTICAL RESULTS

Project: LAUREL BAY SAMPLING 7/23/08

Pace Project No.: 9224209

Sample: 437 ELBERBERRY C		Lab ID: 9224209006	Collected: 07/23/08 15:40	Received: 07/25/08 14:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Dibromofluoromethane (S)	94 %		85-115	1		07/30/08 10:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		79-120	1		07/30/08 10:04	17060-07-0	
Toluene-d8 (S)	100 %		70-120	1		07/30/08 10:04	2037-26-5	

Sample: 441 ELBERBERRY A		Lab ID: 9224209007	Collected: 07/23/08 16:00	Received: 07/25/08 14:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535						
Acenaphthene	ND ug/L		2.0	1	07/29/08 00:00	07/30/08 17:15	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	07/29/08 00:00	07/30/08 17:15	208-96-8	
Anthracene	ND ug/L		0.050	1	07/29/08 00:00	07/30/08 17:15	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/29/08 00:00	07/30/08 17:15	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	07/29/08 00:00	07/30/08 17:15	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	207-08-9	
Chrysene	ND ug/L		0.10	1	07/29/08 00:00	07/30/08 17:15	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	53-70-3	
Fluoranthene	ND ug/L		0.30	1	07/29/08 00:00	07/30/08 17:15	206-44-0	
Fluorene	1.1 ug/L		0.31	1	07/29/08 00:00	07/30/08 17:15	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	193-39-5	
1-Methylnaphthalene	12.6 ug/L		2.0	1	07/29/08 00:00	07/30/08 17:15	90-12-0	
2-Methylnaphthalene	17.8 ug/L		2.0	1	07/29/08 00:00	07/30/08 17:15	91-57-6	
Naphthalene	11.9 ug/L		1.5	1	07/29/08 00:00	07/30/08 17:15	91-20-3	
Phenanthrene	1.8 ug/L		0.20	1	07/29/08 00:00	07/30/08 17:15	85-01-8	
Pyrene	ND ug/L		0.10	1	07/29/08 00:00	07/30/08 17:15	129-00-0	
Nitrobenzene-d5 (S)	51 %		50-150	1	07/29/08 00:00	07/30/08 17:15	4165-60-0	
2-Fluorobiphenyl (S)	56 %		50-150	1	07/29/08 00:00	07/30/08 17:15	321-60-8	
Terphenyl-d14 (S)	62 %		50-150	1	07/29/08 00:00	07/30/08 17:15	1718-51-0	

8260 MSV Low Level		Analytical Method: EPA 8260						
Benzene	ND ug/L		1.0	1		07/29/08 19:27	71-43-2	
Ethylbenzene	1.2 ug/L		1.0	1		07/29/08 19:27	100-41-4	
Naphthalene	15.0 ug/L		1.0	1		07/29/08 19:27	91-20-3	
Toluene	ND ug/L		1.0	1		07/29/08 19:27	108-88-3	
m&p-Xylene	ND ug/L		2.0	1		07/29/08 19:27	1330-20-7	
o-Xylene	ND ug/L		1.0	1		07/29/08 19:27	95-47-6	
4-Bromofluorobenzene (S)	96 %		87-109	1		07/29/08 19:27	460-00-4	
Dibromofluoromethane (S)	104 %		85-115	1		07/29/08 19:27	1868-53-7	
1,2-Dichloroethane-d4 (S)	106 %		79-120	1		07/29/08 19:27	17060-07-0	
Toluene-d8 (S)	100 %		70-120	1		07/29/08 19:27	2037-26-5	

Appendix D
Analytical Data – Permanent Well Groundwater

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
 REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
 MCAS BEAUFORT, SOUTH CAROLINA
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		441 Elderberry Lane		
LOCATION	South Carolina	LBMW117	LBMW118	LBMW119
SAMPLE ID	State Screening	BEA-LB441GW1170310	BEA-LB441GW1180310	BEA-LB441GW1190310
SAMPLE DATE	Values ⁽¹⁾	20100304	20100304	20100304
PAHS (UG/L)				
1-METHYLNAPHTHALENE	10	0.878 J	0.763 J	10.6
2-METHYLNAPHTHALENE	10	1.03 U	0.739 J	11.9
ACENAPHTHENE	NC	1.03 U	0.943 U	0.302 J
ACENAPHTHYLENE	NC	1.03 U	0.943 U	0.943 U
ANTHRACENE	NC	1.03 U	0.943 U	0.943 U
BENZO(A)ANTHRACENE	10	1.03 U	0.943 U	0.943 U
BENZO(A)PYRENE	10	1.03 U	0.943 U	0.943 U
BENZO(B)FLUORANTHENE	10	1.03 U	0.943 U	0.943 U
BENZO(G,H,I)PERYLENE	NC	1.03 U	0.943 U	0.943 U
BENZO(K)FLUORANTHENE	10	1.03 U	0.943 U	0.943 U
CHRYSENE	10	1.03 U	0.943 U	0.943 U
DIBENZO(A,H)ANTHRACENE	10	1.03 U	0.943 U	0.943 U
FLUORANTHENE	NC	1.03 U	0.943 U	0.943 U
FLUORENE	NC	1.03 U	0.943 U	0.517 J
INDENO(1,2,3-CD)PYRENE	NC	1.03 U	0.943 U	0.943 U
PHENANTHRENE	NC	0.453 J	0.943 U	0.943 U
PYRENE	NC	1.03 U	0.943 U	0.943 U
VOCS (UG/L)				
BENZENE	5	0.6 U	0.6 U	0.6 U
ETHYLBENZENE	700	0.5 U	0.5 U	2.56
METHYL TERT-BUTYL ETHER ⁽²⁾	40			
NAPHTHALENE	25	0.5 U	1.05	12.8
TOLUENE	1000	0.5 U	0.5 U	0.46 J
TOTAL XYLENES	10000	0.6 U	0.6 U	8.56

Appendix E
Historical Groundwater Analytical Results

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
 REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
 MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	398 ACORN		
		LBMW104	LBMW105	LBMW106
		BEALB-398-GW-MW104-1011	BEALB-398-GW-MW105-1011	BEALB-398-GW-MW106-1011
		20111028	20111028	20111028
		GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)				
1-METHYLNAPHTHALENE	10	0.55 U	0.5 U	21
2-METHYLNAPHTHALENE	10	0.55 U	0.5 U	17
ACENAPHTHENE	NC	0.55 U	0.5 U	1.1
ACENAPHTHYLENE	NC	2.7 U	2.6 U	2.6 U
ANTHRACENE	NC	0.55 U	0.5 U	0.5 U
BENZO(A)ANTHRACENE	10	0.55 U	0.5 U	0.5 U
BENZO(A)PYRENE	10	2.7 U	2.6 U	2.6 U
BENZO(B)FLUORANTHENE	10	0.55 U	0.5 U	0.5 U
BENZO(G,H,I)PERYLENE	NC	2.7 U	0.12 J	2.6 U
BENZO(K)FLUORANTHENE	10	0.55 U	0.5 U	0.5 U
CHRYSENE	10	0.55 U	0.5 U	0.5 U
DIBENZO(A,H)ANTHRACENE	10	2.7 U	2.6 U	2.6 U
FLUORANTHENE	NC	0.55 U	0.5 U	0.5 U
FLUORENE	NC	2.7 U	2.6 U	1.3 J
INDENO(1,2,3-CD)PYRENE	NC	0.55 U	0.5 U	0.5 U
NAPHTHALENE	25	2.7 U	2.6 U	15
PHENANTHRENE	NC	2.7 U	2.6 U	0.47 J
PYRENE	NC	0.55 U	0.5 U	0.5 U
VOLATILES (UG/L)				
BENZENE	5	0.15 UJ	0.15 UJ	2.6 J
ETHYLBENZENE	700	0.17 U	0.17 U	1.8 J
NAPHTHALENE	25	0.38 J	0.68 J	27
TOLUENE	1000	0.16 U	0.16 U	0.16 U
TOTAL XYLENES	10000	0.19 U	0.19 U	0.19 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
PAGE 2 OF 11

Parameter	Criteria ⁽¹⁾	388 ACORN		
		LBMW110	LBMW111	LBMW112
		BEALB-388-GW-MW-110-1011	BEALB-388-GW-MW111-1016	BEALB-388-GW-MW112-1011
		20111028	20111031	20111031
		GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)				
1-METHYLNAPHTHALENE	10	36	0.095 J	0.5 U
2-METHYLNAPHTHALENE	10	44	0.5 U	0.5 U
ACENAPHTHENE	NC	1.6	0.5 U	0.85 J
ACENAPHTHYLENE	NC	2.6 U	2.6 U	2.6 U
ANTHRACENE	NC	0.5 U	0.5 U	0.5 U
BENZO(A)ANTHRACENE	10	0.5 U	0.5 U	0.5 U
BENZO(A)PYRENE	10	2.6 U	2.6 U	2.6 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.6 U	0.15 J
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U
CHRYSENE	10	0.5 U	0.5 U	0.5 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.6 U	2.6 U
FLUORANTHENE	NC	0.5 U	0.5 U	0.5 U
FLUORENE	NC	2.9 J	2.6 U	0.31 J
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 U	0.5 U
NAPHTHALENE	25	26	0.2 J	3.9 J
PHENANTHRENE	NC	3 J	2.6 U	2.6 U
PYRENE	NC	0.5 U	0.5 U	0.5 U
VOLATILES (UG/L)				
BENZENE	5	0.28 J	0.15 UJ	0.15 UJ
ETHYLBENZENE	700	21	0.17 U	0.17 U
NAPHTHALENE	25	56	0.38 J	5.7
TOLUENE	1000	0.16 U	0.16 U	0.16 U
TOTAL XYLENES	10000	33	0.19 U	0.19 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	391 ACORN			
		LBMW113	LBMW114	LBMW115	LBMW116
		BEALB-391-GW-MW113-1011	BEALB-391-GW-MW114-1011	BEALB-391-GW-MW115-1011	BEALB-391-GW-MW116-1011
		20111031	20111031	20111031	20111031
		GW	GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	0.5 U	0.5 U	0.55 U	0.42 J
2-METHYLNAPHTHALENE	10	0.5 U	0.5 U	0.55 U	0.2 J
ACENAPHTHENE	NC	1.7	3.9	0.55 U	8.1
ACENAPHTHYLENE	NC	2.6 U	2.6 U	2.7 U	0.21 J
ANTHRACENE	NC	0.5 U	0.16 J	0.55 U	0.42 J
BENZO(A)ANTHRACENE	10	0.5 U	0.5 U	0.55 U	0.5 U
BENZO(A)PYRENE	10	2.6 U	2.6 U	0.15 J	2.6 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 U	0.55 U	0.5 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.6 U	2.7 U	0.086 J
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 U	0.55 U	0.5 U
CHRYSENE	10	0.5 U	0.5 U	0.55 U	0.5 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.6 U	2.7 U	2.6 U
FLUORANTHENE	NC	0.2 J	0.49 J	0.55 U	0.84 J
FLUORENE	NC	0.32 J	2.2 J	2.7 U	5.4
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 U	0.55 U	0.5 U
NAPHTHALENE	25	2.6 U	0.52 J	0.47 J	18
PHENANTHRENE	NC	2.6 U	2.6 U	2.7 U	1.4 J
PYRENE	NC	0.15 J	0.3 J	0.55 U	0.41 J
VOLATILES (UG/L)					
BENZENE	5	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
ETHYLBENZENE	700	0.17 U	0.17 U	0.17 U	0.17 U
NAPHTHALENE	25	0.32 U	0.97 J	1.2 J	33
TOLUENE	1000	0.16 U	0.16 U	0.16 U	0.16 U
TOTAL XYLENES	10000	0.19 U	0.19 U	0.19 U	0.19 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	282 BIRCH			
		LBMW136	LBMW137	LBMW138	LBMW139
		BEALB-282-GW-MW136-1111	BEALB-282-GW-MW137-1111	BEALB-282-GW-MW138-1111	BEALB-282-GW-MW139-1111
		20111115	20111116	20111117	20111115
		GW	GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	49	0.55 U	0.55 U	0.44 J
2-METHYLNAPHTHALENE	10	67	0.55 U	0.55 U	0.55 U
ACENAPHTHENE	NC	2.6	0.55 U	0.29 J	0.27 J
ACENAPHTHYLENE	NC	2.6 U	2.7 U	2.7 U	2.7 U
ANTHRACENE	NC	0.5 U	0.55 U	0.55 U	0.55 U
BENZO(A)ANTHRACENE	10	0.5 U	0.55 U	0.55 U	0.55 U
BENZO(A)PYRENE	10	2.6 U	2.7 U	2.7 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.55 U	0.55 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.7 U	2.7 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.5 U	0.55 U	0.55 U	0.55 U
CHRYSENE	10	0.5 U	0.55 U	0.55 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.7 U	2.7 U	2.7 U
FLUORANTHENE	NC	0.5 U	0.55 U	0.55 U	0.55 U
FLUORENE	NC	5.7	2.7 U	0.44 J	0.56 J
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.55 U	0.55 U	0.55 U
NAPHTHALENE	25	38	2.7 U	2.7 U	0.44 J
PHENANTHRENE	NC	3.6 J	2.7 U	2.7 U	2.7 U
PYRENE	NC	0.5 U	0.55 U	0.55 U	0.55 U
VOLATILES (UG/L)					
BENZENE	5	2.4 J	2.5 U	2.5 U	2.5 U
ETHYLBENZENE	700	17	2.5 U	2.5 U	2.5 U
NAPHTHALENE	25	120	2.5 U	2.5 U	2.5 UJ
TOLUENE	1000	0.33 J	2.5 U	2.5 U	2.5 U
TOTAL XYLENES	10000	14	2.5 U	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	441 ELDERBERRY			
		LBMW117	LBMW118	LBMW119	
		BEALB-441-GW-MW117-1111	BEALB-441-GW-MW118-1111	BEALB-441-GW-MW119-1111	BEALB-441-GW-MW119-1111-D
		20111109	20111109	20111109	20111109
		GW	GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	0.78 J	8.3 J	3	3.3
2-METHYLNAPHTHALENE	10	1.3	2.9 J	1.9	2
ACENAPHTHENE	NC	0.5 U	0.5 UJ	0.58 J	0.53 J
ACENAPHTHYLENE	NC	2.6 U	2.6 UJ	2.6 U	2.6 U
ANTHRACENE	NC	0.5 U	0.5 UJ	0.5 U	0.5 U
BENZO(A)ANTHRACENE	10	0.5 U	0.5 UJ	0.5 U	0.5 U
BENZO(A)PYRENE	10	2.6 U	2.6 UJ	2.6 U	2.6 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 UJ	0.5 U	0.5 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.6 UJ	2.6 U	2.6 U
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 UJ	0.5 U	0.5 U
CHRYSENE	10	0.5 U	0.5 UJ	0.5 U	0.5 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.6 UJ	2.6 U	2.6 U
FLUORANTHENE	NC	0.5 U	0.5 UJ	0.5 U	0.5 U
FLUORENE	NC	0.28 J	0.97 J	1.1 J	1 J
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 UJ	0.5 U	0.5 U
NAPHTHALENE	25	2.6 U	5.2 J	3.8 J	4.2 J
PHENANTHRENE	NC	2.6 U	0.58 J	2.6 U	2.6 U
PYRENE	NC	0.5 U	0.5 UJ	0.5 U	0.5 U
VOLATILES (UG/L)					
BENZENE	5	2.5 U	2.5 U	2.5 U	2.5 U
ETHYLBENZENE	700	2.5 U	0.88 J	0.41 J	0.42 J
NAPHTHALENE	25	2.5 U	13	5	5.3
TOLUENE	1000	2.5 U	2.5 U	2.5 U	2.5 U
TOTAL XYLENES	10000	2.5 U	2.5 U	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	437 ELDERBERRY		
		LBMW133 BEALB-437-GW-MW133-1111 20111114 GW	LBMW134 BEALB-437-GW-MW134-1111 20111115 GW	LBMW135 BEALB-437-GW-MW135-1111 20111115 GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)				
1-METHYLNAPHTHALENE	10	45	3.3	0.27 J
2-METHYLNAPHTHALENE	10	72	4.1	0.84 J
ACENAPHTHENE	NC	1.9	0.55 U	0.55 U
ACENAPHTHYLENE	NC	2.6 U	2.7 U	2.7 U
ANTHRACENE	NC	0.5 U	0.55 U	0.55 U
BENZO(A)ANTHRACENE	10	0.5 U	0.55 U	0.55 U
BENZO(A)PYRENE	10	2.6 U	2.7 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.55 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.7 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.5 U	0.55 U	0.55 U
CHRYSENE	10	0.5 U	0.55 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.7 U	2.7 U
FLUORANTHENE	NC	0.5 U	0.55 U	0.55 U
FLUORENE	NC	3.2 J	0.33 J	2.7 U
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.55 U	0.55 U
NAPHTHALENE	25	30	1.8 J	0.2 J
PHENANTHRENE	NC	3.2 J	2.7 U	0.24 J
PYRENE	NC	0.5 U	0.55 U	0.55 U
VOLATILES (UG/L)				
BENZENE	5	0.33 J	2.5 U	2.5 U
ETHYLBENZENE	700	5.2	2.5 U	2.5 U
NAPHTHALENE	25	63 J	2.5 UJ	2.5 UJ
TOLUENE	1000	0.17 J	2.5 U	2.5 U
TOTAL XYLENES	10000	13	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
 REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
 MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	437 ELDERBERRY		
		LBMW140 BEALB-437-GW-MW140-1111 20111115 GW	LBMW141 BEALB-437-GW-MW141-1111 20111116 GW	LBMW142 BEALB-437-GW-MW142-1111 20111116 GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)				
1-METHYLNAPHTHALENE	10	0.55 U	0.55 U	0.12 J
2-METHYLNAPHTHALENE	10	0.55 U	0.55 U	0.55 U
ACENAPHTHENE	NC	0.55 U	0.55 U	0.55 U
ACENAPHTHYLENE	NC	2.7 U	2.7 U	2.7 U
ANTHRACENE	NC	0.55 U	0.55 U	0.55 U
BENZO(A)ANTHRACENE	10	0.55 U	0.55 U	0.55 U
BENZO(A)PYRENE	10	2.7 U	2.7 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.55 U	0.55 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.7 U	2.7 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.55 U	0.55 U	0.55 U
CHRYSENE	10	0.55 U	0.55 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.7 U	2.7 U	2.7 U
FLUORANTHENE	NC	0.55 U	0.55 U	0.55 U
FLUORENE	NC	2.7 U	2.7 U	2.7 U
INDENO(1,2,3-CD)PYRENE	NC	0.55 U	0.55 U	0.55 U
NAPHTHALENE	25	2.7 U	2.7 U	2.7 U
PHENANTHRENE	NC	2.7 U	2.7 U	2.7 U
PYRENE	NC	0.55 U	0.55 U	0.55 U
VOLATILES (UG/L)				
BENZENE	5	2.5 U	2.5 U	2.5 U
ETHYLBENZENE	700	2.5 U	2.5 U	2.5 U
NAPHTHALENE	25	2.5 UJ	2.5 U	2.5 U
TOLUENE	1000	2.5 U	2.5 U	2.5 U
TOTAL XYLENES	10000	2.5 U	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	1054 GARDENIA			
		1054-DMW-1 BEALB-1054-GW-DMW-1-1111 20111108 GW	1054-MW-2 BEALB-1054-GW-MW-2-1111 20111108 GW	1054-MW-4 BEALB-1054-GW-MW4-1111 20111109 GW	1054-MW-7 BEALB-1054-GW-MW-7-1111 20111108 GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	0.5 U	0.5 U	0.5 U	0.55 U
2-METHYLNAPHTHALENE	10	0.5 U	0.5 U	0.5 U	0.55 U
ACENAPHTHENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
ACENAPHTHYLENE	NC	2.6 U	0.33 J	2.6 U	2.7 U
ANTHRACENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(A)ANTHRACENE	10	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(A)PYRENE	10	2.6 U	2.6 U	2.6 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.6 U	2.6 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.55 U
CHRYSENE	10	0.5 U	0.5 U	0.5 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.6 U	2.6 U	2.7 U
FLUORANTHENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
FLUORENE	NC	2.6 U	2.6 U	2.6 U	2.7 U
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
NAPHTHALENE	25	2.6 U	0.4 J	2.6 U	2.7 U
PHENANTHRENE	NC	2.6 U	2.6 U	2.6 U	2.7 U
PYRENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
VOLATILES (UG/L)					
BENZENE	5	2.5 U	2.5 U	2.5 U	2.5 U
ETHYLBENZENE	700	2.5 U	2.5 U	2.5 U	2.5 U
NAPHTHALENE	25	2.5 U	1.5 J	2.5 U	2.5 U
TOLUENE	1000	2.5 U	2.5 U	2.5 U	0.17 J
TOTAL XYLENES	10000	2.5 U	2.5 U	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
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Parameter	Criteria ⁽¹⁾	1054 GARDENIA			
		LBMW127	LBMW128		LBMW129
		BEALB-1054-MW127-1111	BEALB-1054-GW-MW128-1111	BEALB-1054-GW-MW128-1111-D	BEALB-1054-GW-MW129
		20111107	20111107	20111107	20111108
		GW	GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	23	26	25	50
2-METHYLNAPHTHALENE	10	15	19	19	62
ACENAPHTHENE	NC	1.5	1.2	1.3	2.2
ACENAPHTHYLENE	NC	2.6 U	2.6 U	2.6 U	2.6 U
ANTHRACENE	NC	0.5 U	0.5 U	0.5 U	0.5 U
BENZO(A)ANTHRACENE	10	0.5 U	0.5 U	0.5 U	0.5 U
BENZO(A)PYRENE	10	2.6 U	2.6 U	2.6 U	2.6 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.5 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.6 U	0.29 J	0.14 J
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.5 U
CHRYSENE	10	0.5 U	0.5 U	0.5 U	0.5 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.6 U	2.6 U	2.6 U
FLUORANTHENE	NC	0.5 U	0.5 U	0.5 U	0.14 J
FLUORENE	NC	2.4 J	2.3 J	2.3 J	3.9 J
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 U	0.15 J	0.5 U
NAPHTHALENE	25	7.7	14	14	30
PHENANTHRENE	NC	2.4 J	1.2 J	1.3 J	3.4 J
PYRENE	NC	0.5 U	0.5 U	0.5 U	0.1 J
VOLATILES (UG/L)					
BENZENE	5	2.5 U	2.5 U	2.5 U	0.28 J
ETHYLBENZENE	700	3.8 J	5.8	4.9 J	17
NAPHTHALENE	25	18	43	36	77
TOLUENE	1000	2.5 U	2.5 U	2.5 U	1 J
TOTAL XYLENES	10000	1.6 J	4.1 J	3.2 J	26

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
PAGE 10 OF 11

Parameter	Criteria ⁽¹⁾	1472 CARDINAL			
		LBMW130		LBMW131	LBMW132
		BEALB-1472-GW-MW130-1111	BEALB-1472-GW-MW130-1111-D	BEALB-1472-GW-MW131-1111	BEALB-1472-GW-MW132-1111
		20111110	20111110	20111110	20111115
		GW	GW	GW	GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	20	21	0.5 U	0.55 U
2-METHYLNAPHTHALENE	10	29	30	0.5 U	0.55 U
ACENAPHTHENE	NC	0.92 J	0.97 J	0.5 U	0.55 U
ACENAPHTHYLENE	NC	2.6 U	2.5 U	2.6 U	2.7 U
ANTHRACENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(A)ANTHRACENE	10	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(A)PYRENE	10	2.6 U	2.5 U	2.6 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.6 U	2.5 U	2.6 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.5 U	0.5 U	0.5 U	0.55 U
CHRYSENE	10	0.5 U	0.5 U	0.5 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.6 U	2.5 U	2.6 U	2.7 U
FLUORANTHENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
FLUORENE	NC	1.7 J	1.8 J	2.6 U	2.7 U
INDENO(1,2,3-CD)PYRENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
NAPHTHALENE	25	24	25	2.6 U	2.7 U
PHENANTHRENE	NC	0.89 J	1.1 J	2.6 U	2.7 U
PYRENE	NC	0.5 U	0.5 U	0.5 U	0.55 U
VOLATILES (UG/L)					
BENZENE	5	2.8 J	3.3 J	2.5 U	2.5 U
ETHYLBENZENE	700	14	15	2.5 U	2.5 U
NAPHTHALENE	25	56 J	83 J	2.5 U	2.5 UJ
TOLUENE	1000	0.36 J	0.32 J	0.18 J	2.5 U
TOTAL XYLENES	10000	15	15	2.5 U	2.5 U

TABLE 4-1

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
REPORT OF FINDINGS - LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SOUTH CAROLINA
PAGE 11 OF 11

Parameter	Criteria ⁽¹⁾	1472 CARDINAL			
		LBMW143		LBMW144	LBMW145
		BEALB-1472-GW-MW143-1111 20111114 GW	BEALB-1472-GW-MW143-1111-D 20111114 GW	BEALB-1472-GW-MW144-1111 20111114 GW	BEALB-1472-GW-MW145-1111 20111114 GW
POLYNUCLEAR AROMATIC HYDROCARBONS (UG/L)					
1-METHYLNAPHTHALENE	10	0.55 U	0.55 U	0.5 U	0.55 U
2-METHYLNAPHTHALENE	10	0.55 U	0.55 U	0.5 U	0.55 U
ACENAPHTHENE	NC	0.55 U	0.55 U	0.3 J	0.55 U
ACENAPHTHYLENE	NC	2.7 UJ	2.7 UJ	2.6 U	2.7 U
ANTHRACENE	NC	0.55 U	0.55 U	0.5 U	0.55 U
BENZO(A)ANTHRACENE	10	0.55 U	0.55 U	0.5 U	0.55 U
BENZO(A)PYRENE	10	2.7 U	2.7 U	2.6 U	2.7 U
BENZO(B)FLUORANTHENE	10	0.55 U	0.55 U	0.5 U	0.55 U
BENZO(G,H,I)PERYLENE	NC	2.7 U	2.7 U	2.6 U	2.7 U
BENZO(K)FLUORANTHENE	10	0.55 U	0.55 U	0.5 U	0.55 U
CHRYSENE	10	0.55 U	0.55 U	0.5 U	0.55 U
DIBENZO(A,H)ANTHRACENE	10	2.7 U	2.7 U	2.6 U	2.7 U
FLUORANTHENE	NC	0.55 U	0.55 U	0.5 U	0.55 U
FLUORENE	NC	2.7 U	2.7 U	0.7 J	2.7 U
INDENO(1,2,3-CD)PYRENE	NC	0.55 U	0.55 U	0.5 U	0.55 U
NAPHTHALENE	25	2.7 U	2.7 U	2.6 U	2.7 U
PHENANTHRENE	NC	2.7 U	2.7 U	2.6 U	2.7 U
PYRENE	NC	0.55 U	0.55 U	0.5 U	0.55 U
VOLATILES (UG/L)					
BENZENE	5	2.5 U	2.5 U	2.5 U	2.5 U
ETHYLBENZENE	700	2.5 U	2.5 U	2.5 U	2.5 U
NAPHTHALENE	25	2.5 UJ	2.5 UJ	2.5 UJ	13 J
TOLUENE	1000	2.5 U	2.5 U	2.5 U	2.5 U
TOTAL XYLENES	10000	2.5 U	2.5 U	2.5 U	2.5 U

NOTES:

(1)South Carolina State Screening Value are Risk Based Screening Levels (RBSLs) for groundwater (SCDHEC, 2011).

All positive results have been bolded.

Shaded values indicate exceedance of criteria.

NC = No Criteria Available.

DATA QUALIFIERS:

U = Indicates the parameter was not detected.

UJ = Indicates the parameter was not detected; however, the detection limit is estimated.

J = Indicates the result is estimated.

Table 4
Summary of Analytical Results
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL¹	282 Birch Drive MW136 BEALB282MW136WG20130730 OG30003-016 07/30/13	282 Birch Drive MW137 BEALB282MW137WG20130730 OG30003-014 07/30/13	282 Birch Drive MW138 BEALB282MW138WG20130730 OG30003-015 07/30/13	282 Birch Drive MW139 BEALB282MW139WG20130730 OG30003-017 07/30/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	0.41 J/	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	1.2	< 0.25	< 0.25	< 0.25
Naphthalene	25	57	< 0.25	< 0.25	0.41 J/
Toluene	1,000	< 0.25	< 0.25	< 0.25	< 0.25
Xylenes, Total	10,000	< 0.25	< 0.25	< 0.25	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.11	< 0.10	< 0.10	< 0.10
Benzo(b)fluoranthene	10	< 0.11	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	10	< 0.11	< 0.10	< 0.10	< 0.10
Chrysene	10	< 0.11	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	10	< 0.11	< 0.10	< 0.10	< 0.10
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
SCDHEC RBSL¹		388 Acorn Drive MW110 BEALB388MW110WG20130729 OG30003-001 07/29/13	388 Acorn Drive MW110-C BEALB388MW110WG20130729-C OG30003-002 07/29/13	388 Acorn Drive MW111 BEALB388MW111WG20130729 OG30003-004 07/29/13	388 Acorn Drive MW112 BEALB388MW112WG20130729 OG30003-003 07/29/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	0.25 J/	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	15	< 0.25	< 0.25	< 0.25
Naphthalene	25	72	< 0.25	< 0.25	14
Toluene	1,000	< 0.25	< 0.25	< 0.25	< 0.25
Xylenes, Total	10,000	23	< 0.25	< 0.25	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	0.33	NA	< 0.10	< 0.11
Benzo(b)fluoranthene	10	0.19 J/	NA	< 0.10	< 0.11
Benzo(k)fluoranthene	10	< 0.11	NA	< 0.10	< 0.11
Chrysene	10	0.20 J/	NA	< 0.10	< 0.11
Dibenz(a,h)anthracene	10	< 0.11	NA	< 0.10	< 0.11
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
SCDHEC RBSL¹		391 Acorn Drive MW113 BEALB391MW113WG20130730 OG30003-009 07/30/13	391 Acorn Drive MW113-C BEALB391MW113WG20130730-C OG30003-010 07/30/13	391 Acorn Drive MW114 BEALB391MW114WG20130729 OG30003-007 07/29/13	391 Acorn Drive MW114-A BEALB391MW114WG20130729-A OG30003-008 07/29/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.25	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 0.25
Naphthalene	25	< 0.25	< 0.25	6.6	6.3
Toluene	1,000	< 0.25	< 0.25	< 0.25	< 0.25
Xylenes, Total	10,000	< 0.25	< 0.25	< 0.25	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.11	NA	< 0.11	< 0.11
Benzo(b)fluoranthene	10	< 0.11	NA	< 0.11	< 0.11
Benzo(k)fluoranthene	10	< 0.11	NA	< 0.11	< 0.11
Chrysene	10	< 0.11	NA	< 0.11	< 0.11
Dibenz(a,h)anthracene	10	< 0.11	NA	< 0.11	< 0.11
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
SCDHEC RBSL¹		391 Acorn Drive MW115 BEALB391MW115WG20130729 OG30003-006 07/29/13	391 Acorn Drive MW116 BEALB391MW116WG20130729 OG30003-005 07/29/13	398 Acorn Drive MW104 BEALB398MW104WG20130730 OG30003-013 07/30/13	398 Acorn Drive MW105 BEALB398MW105WG20130730 OG30003-012 07/30/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.25	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 0.25
Naphthalene	25	< 0.25	3.7	< 0.25	< 0.25
Toluene	1,000	< 0.25	< 0.25	< 0.25	< 0.25
Xylenes, Total	10,000	< 0.25	< 0.25	< 0.25	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.12	< 0.10	< 0.10	< 0.11
Benzo(b)fluoranthene	10	< 0.12	< 0.10	< 0.10	< 0.11
Benzo(k)fluoranthene	10	< 0.12	< 0.10	< 0.10	< 0.11
Chrysene	10	< 0.12	< 0.10	< 0.10	< 0.11
Dibenz(a,h)anthracene	10	< 0.12	< 0.10	< 0.10	< 0.11

Table 4
Summary of Analytical Results
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	398 Acorn Drive MW106 BEALB398MW106WG20130730 OG30003-011 07/30/13	437 Elderberry Drive MW133 BEALB437MW133WG20130731 OH01003-006 07/31/13	437 Elderberry Drive MW133-A BEALB437MW133WG20130731-A OH01003-007 07/31/13	437 Elderberry Drive MW134 BEALB437MW134WG20130731 OH01003-008 07/31/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	0.71	0.93	0.96	< 0.50
Ethylbenzene	700	0.18	25	26	< 0.50
Naphthalene	25	0.93	110	110	6.9
Toluene	1,000	< 0.25	0.57	0.61	< 0.50
Xylenes, Total	10,000	< 0.25	49	50	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.11	< 0.21 *Q	< 0.21 *Q	< 0.21
Benzo(b)fluoranthene	10	< 0.11	< 0.21 *Q	< 0.21 *Q	< 0.21
Benzo(k)fluoranthene	10	< 0.11	< 0.21 *Q	< 0.21 *Q	< 0.21
Chrysene	10	< 0.11	< 0.21 *Q	< 0.21 *Q	< 0.21
Dibenz(a,h)anthracene	10	< 0.11	< 0.21 *Q	< 0.21 *Q	< 0.21

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	437 Elderberry Drive MW135 BEALB437MW135WG20130731 OH01003-005 07/31/13	437 Elderberry Drive MW140 BEALB437MW140WG20130731 OH01003-001 07/31/13	437 Elderberry Drive MW140-C BEALB437MW140WG20130731-C OH01003-002 07/31/13	437 Elderberry Drive MW141 BEALB437MW141WG20130731 OH01003-003 07/31/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	700	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	25	< 0.50	< 0.50	< 0.50	< 0.50
Toluene	1,000	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes, Total	10,000	< 0.50	< 0.50	< 0.50	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.21	< 0.21	NA	< 0.21
Benzo(b)fluoranthene	10	< 0.21	< 0.21	NA	< 0.21
Benzo(k)fluoranthene	10	< 0.21	< 0.21	NA	< 0.21
Chrysene	10	< 0.21	< 0.21	NA	< 0.21
Dibenz(a,h)anthracene	10	< 0.21	< 0.21	NA	< 0.21

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	437 Elderberry Drive MW142 BEALB437MW142WG20130731 OH01003-004 07/31/13	441 Elderberry Drive MW117 BEALB441MW117WG20130731 OH01003-009 07/31/13	441 Elderberry Drive MW118 BEALB441MW118WG20130731 OH01003-010 07/31/13	441 Elderberry Drive MW119 BEALB441MW119WG20130731 OH01003-011 07/31/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	700	< 0.50	< 0.50	< 0.50	0.22 J/
Naphthalene	25	0.33	< 0.50	6.9	7.0
Toluene	1,000	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes, Total	10,000	0.18	< 0.50	< 0.50	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.21	< 0.21	< 0.21	< 0.21
Benzo(b)fluoranthene	10	< 0.21	< 0.21	< 0.21	< 0.21
Benzo(k)fluoranthene	10	< 0.21	< 0.21	< 0.21	< 0.21
Chrysene	10	< 0.21	< 0.21	< 0.21	< 0.21
Dibenz(a,h)anthracene	10	< 0.21	< 0.21	< 0.21	< 0.21

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1054 Gardenia Drive DMW1 1054DMW1WG20130801 OH01003-017 08/01/13	1054 Gardenia Drive MW2 1054MW2WG20130801 OH01003-018 08/01/13	1054 Gardenia Drive MW2-A 1054MW2WG20130801-A OH01003-019 08/01/13	1054 Gardenia Drive MW4 1054MW4WG20130801 OH01003-020 08/01/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	700	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene	25	< 0.50	3.7	3.7	< 0.50
Toluene	1,000	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes, Total	10,000	< 0.50	< 0.50	< 0.50	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.20	< 0.21	< 0.21	< 0.20
Benzo(b)fluoranthene	10	< 0.20	< 0.21	< 0.21	< 0.20
Benzo(k)fluoranthene	10	< 0.20	< 0.21	< 0.21	< 0.20
Chrysene	10	< 0.20	< 0.21	< 0.21	< 0.20
Dibenz(a,h)anthracene	10	< 0.20	< 0.21	< 0.21	< 0.20

Table 4
Summary of Analytical Results
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1054 Gardenia Drive MW7 1054MW7WG20130801 OH01003-016 08/01/13	1054 Gardenia Drive MW127 BEALB1054MW127WG20130801 OH01003-014 08/01/13	1054 Gardenia Drive MW128 BEALB1054MW128WG20130801 OH01003-012 08/01/13	1054 Gardenia Drive MW128-C BEALB1054MW128WG20130801-C OH01003-013 08/01/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	700	< 0.50	2.5	4.4	< 0.50
Naphthalene	25	3.6	25	42	< 0.50
Toluene	1,000	< 0.50	< 0.50	0.20 J/	< 0.50
Xylenes, Total	10,000	< 0.50	0.62	6.3	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.21	< 0.21 */Q	< 0.21 */Q	NA
Benzo(b)fluoranthene	10	< 0.21	< 0.21 */Q	< 0.21 */Q	NA
Benzo(k)fluoranthene	10	< 0.21	< 0.21 */Q	< 0.21 */Q	NA
Chrysene	10	< 0.21	< 0.21 */Q	< 0.21 */Q	NA
Dibenz(a,h)anthracene	10	< 0.21	< 0.21 */Q	< 0.21 */Q	NA

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1054 Gardenia Drive MW129 BEALB1054MW129WG20130801 OH01003-015 08/01/13	1472 Cardinal Lane MW130 BEALB1472MW130WG20130802 OH03004-006 08/02/13	1472 Cardinal Lane MW130-A BEALB1472MW130WG20130802-A OH03004-007 08/02/13	1472 Cardinal Lane MW131 BEALB1472MW131WG20130802 OH03004-005 08/02/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	0.32 J/	3.3	3.2	< 0.25
Ethylbenzene	700	18	13	13	< 0.25
Naphthalene	25	73	37	37	< 0.25
Toluene	1,000	2.1	0.33 J/	0.32 J/	< 0.25
Xylenes, Total	10,000	35	19	18	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.21	< 0.11 /Q	< 0.11	< 0.11
Benzo(b)fluoranthene	10	< 0.21	< 0.11 /Q	< 0.11	< 0.11
Benzo(k)fluoranthene	10	< 0.21	< 0.11 /Q	< 0.11	< 0.11
Chrysene	10	< 0.21	< 0.11 /Q	< 0.11	< 0.11
Dibenz(a,h)anthracene	10	< 0.21	< 0.11 /Q	< 0.11	< 0.11

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1472 Cardinal Lane MW132 BEALB1472MW132WG20130802 OH03004-004 08/02/13	1472 Cardinal Lane MW143 BEALB1472MW143WG20130802 OH03004-003 08/02/13	1472 Cardinal Lane MW144 BEALB1472MW144WG20130802 OH03004-001 08/02/13	1472 Cardinal Lane MW144-C BEALB1472MW144WG20130802-C OH03004-002 08/02/13
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.25	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 0.25
Naphthalene	25	< 0.25	3.8	4.1	< 0.25
Toluene	1,000	< 0.25	< 0.25	< 0.25	< 0.25
Xylenes, Total	10,000	< 0.25	< 0.25	< 0.25	< 0.25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.10	< 0.11	< 0.11 /Q	NA
Benzo(b)fluoranthene	10	< 0.10	< 0.11	< 0.11 /Q	NA
Benzo(k)fluoranthene	10	< 0.10	< 0.11	< 0.11 /Q	NA
Chrysene	10	< 0.10	< 0.11	< 0.11 /Q	NA
Dibenz(a,h)anthracene	10	< 0.10	< 0.11	< 0.11 /Q	NA

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1472 Cardinal Lane MW145 BEALB1472MW145WG20130801 OH01003-021 08/01/13
Volatile Organic Compounds by Method 8260B (µg/L)		
Benzene	5	< 0.50
Ethylbenzene	700	< 0.50
Naphthalene	25	< 0.50
Toluene	1,000	< 0.50
Xylenes, Total	10,000	< 0.50
Semivolatile Organic Compounds by Method 8270D (µg/L)		
Benzo(a)anthracene	10	< 0.21
Benzo(b)fluoranthene	10	< 0.21
Benzo(k)fluoranthene	10	< 0.21
Chrysene	10	< 0.21
Dibenz(a,h)anthracene	10	< 0.21

Notes:

¹ SCDHEC RBSL - South Carolina Department of Health and Environmental Control Risk Based Screening Level

-A - Indicates a field duplicate sample.

-C - Indicates a trip blank sample.

BOLD font indicates the analyte was detected.

LBMH - Laurel Bay Military Housing

NA - Not Analyzed

NS - No Standard

Shading indicates the concentration exceeds the SCDHEC RBSL.

See Table 6 for explanation of data qualifiers.

µg/L - micrograms per liter

Table 4
Summary of Analytical Results - September 2014
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	282 Birch Drive MW136 BEALB282MW136WG20140912 PI13008-002 09/12/14	282 Birch Drive MW136-a BEALB282MW136WG20140912-a PI13008-003 09/12/14	282 Birch Drive MW136-c BEALB282MW136WG20140912-c PI13008-001 09/12/14	282 Birch Drive MW137 BEALB282MW137WG20140912 PI13008-005 09/12/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	0.76 J/	0.76 J/	< 0.20	< 0.20
Naphthalene	25	14	15	< 0.20	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	NA	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	NA	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	NA	< 0.040
Chrysene	10	< 0.040	< 0.040	NA	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	NA	< 0.080
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
	SCDHEC RBSL ¹	282 Birch Drive MW138 BEALB282MW138WG20140912 PI13008-004 09/12/14	282 Birch Drive MW139 BEALB282MW139WG20140912 PI13008-006 09/12/14	282 Birch Drive MW139-d BEALB282MW139WG20140912-d PI13008-007 09/12/14	388 Acorn Drive MW110 BEALB388MW110WG20140910 PI11022-002 09/10/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	2 J/
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	14
Naphthalene	25	< 0.20	< 0.20	< 0.20	71
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	18
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
	SCDHEC RBSL ¹	388 Acorn Drive MW110-c BEALB388MW110WG20140910-c PI11022-001 09/10/14	388 Acorn Drive MW111 BEALB388MW111WG20140910 PI11022-003 09/11/14	388 Acorn Drive MW112 BEALB388MW112WG20140910 PI11022-004 09/10/14	391 Acorn Drive MW113 BEALB391MW113WG20140910 PI11022-007 09/10/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	< 0.20	0.48 J/	26	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	NA	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	NA	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	NA	< 0.040	< 0.040	< 0.040
Chrysene	10	NA	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	NA	< 0.080	< 0.080	< 0.080
LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected					
	SCDHEC RBSL ¹	391 Acorn Drive MW114 BEALB391MW114WG20140910 PI11022-008 09/10/14	391 Acorn Drive MW115 BEALB391MW115WG20140910 PI11022-005 09/10/14	391 Acorn Drive MW116 BEALB391MW116WG20140910 PI11022-006 09/10/14	398 Acorn Drive MW104 BEALB398MW104WG20140910 PI11022-010 09/10/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	12	0.89 J/	0.57 J/	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

Table 4
Summary of Analytical Results - September 2014
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	398 Acorn Drive MW105 BEALB398MW105WG20140910 PI11022-009 09/10/14	398 Acorn Drive MW106 BEALB398MW106WG20140910 PI11022-011 09/10/14	437 Elderberry Drive MW133 BEALB437MW133WG20140911 PI12015-006 09/11/14	437 Elderberry Drive MW133-a BEALB437MW133WG20140911-a PI12015-007 09/11/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	0.40 J/	0.41 J/
Ethylbenzene	700	< 0.20	< 0.20	8.8	9.3
Naphthalene	25	< 0.20	< 0.20	41	45
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	18	19
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	437 Elderberry Drive MW134 BEALB437MW134WG20140911 PI12015-010 09/11/14	437 Elderberry Drive MW135 BEALB437MW135WG20140911 PI12015-009 09/11/14	437 Elderberry Drive MW140 BEALB437MW140WG20140911 PI12015-003 09/11/14	437 Elderberry Drive MW141 BEALB437MW141WG20140911 PI12015-001 09/11/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	1.1	< 0.20	< 0.20	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	437 Elderberry Drive MW141-c BEALB437MW141WG20140911-c PI12015-013 09/11/14	437 Elderberry Drive MW142 BEALB437MW142WG20140911 PI12015-002 09/11/14	441 Elderberry Drive MW117 BEALB441MW117WG20140911 PI12015-008 09/11/14	441 Elderberry Drive MW118 BEALB441MW118WG20140911 PI12015-005 09/11/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	< 0.20	< 0.20	0.54 J/	2.7
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	NA	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	NA	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	NA	< 0.040	< 0.040	< 0.040
Chrysene	10	NA	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	NA	< 0.080	< 0.080	< 0.080

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	441 Elderberry Drive MW119 BEALB441MW119WG20140911 PI12015-004 09/11/14	1054 Gardenia Drive DMW1 1054DMW1WG20140911 PI12015-016 09/11/14	1054 Gardenia Drive MW2 1054MW2WG20140911 PI12015-019 09/11/14	1054 Gardenia Drive MW4 1054MW4WG20140911 PI12015-011 09/11/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	0.33 J/	< 0.20	< 0.20	< 0.20
Naphthalene	25	8.1	< 0.20	0.45 J/	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

Table 4
Summary of Analytical Results - September 2014
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1054 Gardenia Drive MW7 1054MW7WG20140911 PI12015-014 09/11/14	1054 Gardenia Drive MW127 BEALB1054MW127WG20140911 PI12015-012 09/11/14	1054 Gardenia Drive MW128 BEALB1054MW128WG20140911 PI12015-015 09/11/14	1054 Gardenia Drive MW129 BEALB1054MW129WG20140911 PI12015-017 09/11/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	0.19 J/
Ethylbenzene	700	< 0.20	2.3	2.4	13
Naphthalene	25	< 0.20	15	18	54
Toluene	1,000	1.5	< 0.20	< 0.20	1.3
Xylenes, Total	10,000	< 0.40	1.1	2.5	25
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1054 Gardenia Drive MW129-a BEALB1054MW129WG20140911-a PI12015-018 09/11/14	1472 Cardinal Lane MW130 BEALB1472MW130WG20140912 PI13008-012 09/12/14	1472 Cardinal Lane MW130-a BEALB1472MW130WG20140912-a PI13008-013 09/12/14	1472 Cardinal Lane MW131 BEALB1472MW131WG20140912 PI13008-010 09/12/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	0.19 J/	5.6	5.8	< 0.40
Ethylbenzene	700	12	17	19	< 0.20
Naphthalene	25	44	36	40	< 0.20
Toluene	1,000	1.3	0.40 J/	0.42 J/	< 0.20
Xylenes, Total	10,000	22	14 /J	18	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address Well ID Sample ID Lab Sample ID Date Collected	SCDHEC RBSL ¹	1472 Cardinal Lane MW132 BEALB1472MW132WG20140912 PI13008-014 09/12/14	1472 Cardinal Lane MW143 BEALB1472MW143WG20140912 PI13008-009 09/12/14	1472 Cardinal Lane MW144 BEALB1472MW144WG20140912 PI13008-008 09/12/14	1472 Cardinal Lane MW145 BEALB1472MW145WG20140912 PI13008-011 09/12/14
Volatile Organic Compounds by Method 8260B (µg/L)					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	< 0.20	< 0.20	< 0.20	< 0.20
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
Semivolatile Organic Compounds by Method 8270D (µg/L)					
Benzo(a)anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(b)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Benzo(k)fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz(a,h)anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080

Notes:

¹ SCDHEC RBSL - South Carolina Department of Health and Environmental Control Risk Based Screening Level

-a - Indicates a field duplicate sample.

-c - Indicates a trip blank sample.

-d - Indicates a rinsate blank sample.

J/ - Indicates an estimated result < PQL and > MDL.

/J - Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

LBMH - Laurel Bay Military Housing

NA - Not Analyzed

NS - No Standard

BOLD font indicates the analyte was detected.

Shading indicates the concentration exceeds the SCDHEC RBSL.

Appendix F

Regulatory Correspondence

BOARD:
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C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

BOARD:
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Glenn A. McCall

Coleman F. Buckhouse, MD

25 October 2007

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

Re: MCAS – Laurel Bay Housing – 441 Elderberry
Site ID # 03720
UST Closure Reports received 15 August 2007
Beaufort County

Dear Mr. Broadfoot:

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

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

Please submit a groundwater sampling proposal to conduct the necessary assessment and/or remedial measures at this site no later than 29 February 2007. Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or bishopma@dhec.sc.gov.

Sincerely,

Michael Bishop, Hydrogeologist
Groundwater Quality Section
Bureau of Water

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



C. Earl Hunter, Commissioner

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

8 December 2008

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

Re: MCAS – Laurel Bay Housing – 441 Elderberry
Site ID # 03720
Groundwater Sampling Results received 6 November 2008
Beaufort County

Dear Mr. Ehde:

The Department has completed review of the referenced document. The submitted analytical results indicate that chemicals of concern are above established Risk-Based Screening Levels and additional investigative and/or remedial actions are warranted.

The Department recommends that a permanent groundwater monitoring well be installed to verify the results of the temporary groundwater monitoring well. Please submit the proposal to conduct the necessary assessment and/or remedial measures at this site no later than 29 February 2009.

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

BOARD:
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Promoting and protecting the health of the public and the environment

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M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

Bureau of Land and Waste Management
Division of Waste Management

April 6, 2011

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

Facility: Marine Corps Air Station, Beaufort
EPA ID #: SC1 750 216 169

RE: Review
Report of Findings for Laurel Bay Military Housing Area
Dated July 2010 and
Well Installation and Sampling Work Plan for
Laurel Bay Military Housing
Dated March 2011

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Report of Findings for Laurel Bay Military Housing Area on July 23, 2010 and Addendum to Well Installation and Sampling Work Plan for Laurel Bay Military Housing on March 4, 2011. Heating oil stored in underground storage tanks (USTs) historically heated homes in Laurel Bay. The USTs are no longer used for storing heating oil, and MCAS Beaufort is currently removing these USTs and evaluating their integrity. This Report of Findings and Well Installation and Sampling Work Plan document the groundwater conditions following limited soil sampling and temporary monitoring wells showed evidence of groundwater contamination related to some of the heating oil USTs.

Based on this review, the Department has generated the attached memorandum by Michael W. Danielsen from the Federal Facilities Groundwater Section. The response to the Department's comments may be addressed by submitting revised pages to be inserted into the original document, or by submitting another document. If new or revised pages

are submitted, please indicate whether each submitted page is a revision to an existing page in the original document or a new page not contained in the original document. Each revised page should be coded. For example, 32(R-7/30/07) would be page 32, revised 7/30/07. In addition to revisions, please provide a summary of the comment responses and revision pages.

Please note that the Department's review is based on available information provided by the MCAS. Any information found to be contradictory to this decision might require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions regarding this issue, please contact me at (803) 896-6675 or petruslb@dhec.sc.gov.

Sincerely,



Laurel B. Petrus, Environmental Engineer Associate
Corrective Action Engineering Section

Attachments

cc: Michael W. Danielsen, Hydrogeologist
Russell Berry, EQC Region 8
Dan Owens, NAVFAC SE



South Carolina Department of Health
and Environmental Control

**Federal Facilities
Groundwater Section
2600 Bull Street
Columbia, SC 29201
Telephone (803) 896-4000
Fax (803) 896-4002**

MEMORANDUM

TO: Laurel Petrus, Environmental Engineer Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

FROM: Michael W. Danielsen, Hydrogeologist
Federal Facilities Groundwater Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: April 5, 2011

RE: Marine Corps Air Station (MCAS)
Beaufort, South Carolina
SC1 750 216 169

Report of Findings for Laurel Bay Military Housing Area
Dated July 2010 (Received July 23, 2010)

Addendum to Well Installation and Sampling Work Plan for
Laurel Bay Military Housing Area
Dated March 2011 (Received March 4, 2011)

The above referenced Findings Report provides information from the installation of 35 monitoring wells as part of an ongoing effort to remove underground residential heating oil tanks (USTs) from the Laurel Bay Military Housing Area.

The Addendum to Well Installation and Sampling Work Plan provides the proposed well installation locations and sampling recommended in the Finding Report.

The documents referenced above have been reviewed with respect to the S.C. Pollution Control Act 48-1-10 and the S.C. Hazardous Waste Management Act, and other appropriate guidance documents.

Please see the attached comments.

CC: BLWM file # 50500

**Report of Findings for Laurel Bay Military Housing Area and
Addendum to Well Installation and Sampling Work Plan for
Laurel Bay Military Housing Area
MCAS
Federal Facilities Groundwater Section
Comments prepared by
Michael W. Danielsen April 5, 2011**

Report of Findings for Laurel Bay Military Housing Area

1. Page 11 Section 6.0, Recommendations

This section recommends no further action (NFA), annual monitoring, or expansion of the monitoring well network as follows:

NFA for:

- 201 Balsam Street,
- 390 Acorn Drive,
- 391 Acorn Drive,
- 299 Birch Lane,
- 1118 Iris Lane,

Annual groundwater monitoring for benzene, toluene, ethylene, xylene (BTEX), naphthalene, and polyaromatic hydrocarbons (PAH) at:

- 398 Acorn Drive,
- 388 Acorn Drive,
- 441 Elderberry Lane,
- 282 Birch Road,
- 1054 Gardenia Drive,

Expansion of the monitoring well networks and performance of annual groundwater monitoring for 1-methylnaphthalene, 2-methylnaphthalene, and/or naphthalene at the following:

- 437 Elderberry Lane- Install three additional monitoring wells downgradient of MW133.
- 1472 Cardinal Lane- Install three additional monitoring wells sidegradient and downgradient of MW130 to bound the contaminant plume.

In addition, all new monitoring wells will be sampled for BTEX, naphthalene, and PAH.



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

Division of Waste Management
Bureau of Land and Waste Management

June 4, 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
Draft Final 2014 Groundwater Monitoring Report (LTM)
Laurel Bay Military Housing Area

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Long Term Monitoring Report on March 17, 2015. 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 groundwater monitoring report. Based on this review, the Department agrees with the following recommendations which are based on the Decision Rules located in Worksheet 11 of the Final UFP SAP for Groundwater Media, Revision 1 and Response to SCDHEC Comments approved April 20, 2015:

- No Further Action for 441 Elderberry Drive.
- Remove the parameters ethylbenzene, toluene, xylene and PAHs for the COPC list for the following sites: 282 Birch Road, 388 Acorn Drive, 391 Acorn Drive, 398 Acorn Drive, 437 Elderberry Drive, 1054 Gardenia Drive and 1472 Cardinal Lane.
- Continue annual monitoring for naphthalene and benzene only at seven sites: 282 Birch Road, 388 Acorn Drive, 391 Acorn Drive, 398 Acorn Drive, 437 Elderberry Drive, 1054 Gardenia Drive and 1472 Cardinal Lane.
- Maintain the passive recovery system in monitoring well BEALB388MW110 at 388 Acorn Drive on a quarterly basis.

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
Department of Defense Corrective Action Section

Cc: Russell Berry, EQC Region 8
Shawn Dolan, Resolution Consultants
Bryan Beck, NAVFAC MID ATLANTIC