

**SUMMARY REPORT  
138 ACORN DRIVE (FORMERLY 391 ACORN 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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**Contract Number: N62470-14-D-9016  
CTO WE52  
JUNE 2021**

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### List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
ft	feet
IDIQ	Indefinite Delivery, Indefinite Quantity
IGWA	Initial Groundwater Assessment
JV	Joint Venture
LBMH	Laurel Bay Military Housing
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 138 Acorn Drive (Formerly 391 Acorn 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 138 Acorn Drive (Formerly 391 Acorn Drive). The sampling activities at 138 Acorn Drive (Formerly 391 Acorn Drive) comprised a soil investigation, IGWA sampling, installation and sampling of four permanent monitoring wells and LTM sampling. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 391 Acorn Drive* (MCAS Beaufort, 2008). 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 2015 is presented in Appendix E.

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

On June 28, 2007, a single 280 gallon heating oil UST was removed from the front yard at 138 Acorn Drive (Formerly 391 Acorn Drive). The former UST location is indicated on the figures 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 5'3" 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 USTs to represent a worst case scenario and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

## **2.2 Soil Analytical Results**

A summary of the laboratory analytical results and SCDHEC RBSLs 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 138 Acorn Drive (Formerly 391 Acorn Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated September 10, 2008, SCDHEC requested an IGWA for 138 Acorn Drive (Formerly 391 Acorn 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 29, 2008, a single temporary monitoring well was installed at 138 Acorn Drive (Formerly 391 Acorn 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 figures 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 sampling 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 138 Acorn Drive (Formerly 391 Acorn 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 30, 2008, SCDHEC requested a permanent well be installed for 138 Acorn Drive (Formerly 391 Acorn 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, four permanent monitoring wells were installed at 138 Acorn Drive (Formerly 391 Acorn 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, MW115, 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 figures of the UST Assessment Report (Appendix B). Three additional permanent wells (MW113, MW114 and MW116) were also installed around the property at 138 Acorn Drive (Formerly 391 Acorn 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 138 Acorn Drive (Formerly 391 Acorn Drive) were less than the SCDHEC RBSLs (Table 3), however, it was recommended that the permanent monitoring wells should continue to be sampled as downgradient wells for an adjacent property. SCDHEC agreed with the recommendation to sample the permanent monitoring wells at 138 Acorn Drive (Formerly 391 Acorn Drive) in a letter dated April 6, 2011. The groundwater results collected the following year from 138 Acorn Drive (Formerly 391 Acorn Drive) at MW116 were greater than the SCDHEC RBSLs, which indicated that further investigation was required. In a letter dated July 5, 2012, SCDHEC requested that LTM be carried out for 138 Acorn Drive (Formerly 391 Acorn Drive) to continue to monitor the impact to groundwater detected in the permanent well sample (MW116). SCDHEC's request letters are provided in Appendix F.

## **2.7 Long Term Monitoring**

The LTM program at 138 Acorn Drive (Formerly 391 Acorn Drive) consisted of annual groundwater sampling at the four permanent monitoring wells. LTM sampling activities were conducted in 2011, and then annually from 2013 until 2015 at the referenced site. The latest groundwater sampling details are provided in the *2015 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 138 Acorn Drive (Formerly 391 Acorn Drive) are provided in the *2015 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 2015 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 138 Acorn Drive (Formerly 391 Acorn Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 4) during the 2013, 2014 and 2015 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 138 Acorn Drive (Formerly 391 Acorn Drive). The NFA determination for groundwater was obtained in a letter dated February 22, 2016. SCDHEC's letter is provided in Appendix F.

## **2.7 Long Term Monitoring**

The LTM program at 138 Acorn Drive (Formerly 391 Acorn 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 2015 at the referenced site. The latest groundwater sampling details are provided in the *2015 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 138 Acorn Drive (Formerly 391 Acorn Drive) are provided in the *2015 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 2015 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 138 Acorn Drive (Formerly 391 Acorn Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 4) during the 2013, 2014 and 2015 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 138 Acorn Drive (Formerly 391 Acorn Drive). The NFA determination for groundwater was obtained in a letter dated February 22, 2016. SCDHEC's letter is provided in Appendix F.

## **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2008. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 391 Acorn Drive, Laurel Bay Military Housing Area*, January 2008.

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. *2015 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*, December 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**  
**138 Acorn Drive (Formerly 391 Acorn Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 07/30/07	
		391 Acorn Bottom - 01	391 Acorn Side - 02
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)			
Benzene	0.003	0.000842	ND
Ethylbenzene	1.15	0.000673	0.000696
Naphthalene	0.036	ND	0.00463
Toluene	0.627	0.00309	0.00339
Xylenes, Total	13.01	0.00222	0.00236
Semivolatile Organic Compounds Analyzed by EPA Method 8270 (mg/kg)			
Benzo(a)anthracene	0.066	0.0529	0.255
Benzo(b)fluoranthene	0.066	0.0585	0.333
Benzo(k)fluoranthene	0.066	0.0262	0.128
Chrysene	0.066	0.0546	ND
Dibenz(a,h)anthracene	0.066	ND	0.0751

**Notes:**

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 (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**  
**138 Acorn Drive (Formerly 391 Acorn Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 07/29/08
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	<b>118</b>
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

**Notes:**

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

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

**Table 3**  
**Laboratory Analytical Results - Permanent Monitoring Well Groundwater**  
**138 Acorn Drive (Formerly 391 Acorn Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Samples Collected 02/23/10 and 02/24/10			
			MW113 02/23/10	MW114 02/23/10	MW115 02/24/10	MW116 02/24/10
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)						
Benzene	5	16.24	ND	ND	ND	ND
Ethylbenzene	700	45.95	ND	ND	ND	ND
Naphthalene	25	29.33	ND	11.8	3.59	2.41
Toluene	1000	105,445	ND	ND	ND	ND
Xylenes, Total	10,000	2,133	ND	ND	ND	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)						
Benzo(a)anthracene	10	NA	ND	ND	ND	ND
Benzo(b)fluoranthene	10	NA	ND	ND	ND	ND
Benzo(k)fluoranthene	10	NA	ND	ND	ND	ND
Chrysene	10	NA	ND	ND	ND	ND
Dibenz(a,h)anthracene	10	NA	ND	ND	ND	ND

**Notes:**

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

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The groundwater laboratory report is provided in Appendix 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**  
**138 Acorn Drive (Formerly 391 Acorn 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 <sup>(1)</sup> (µg/L)		5	700	25	1000	10,000	10	10	10	10	10
Site-Specific Groundwater VISLs <sup>(2)</sup> (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										
BEALB391MW113	10/31/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7/30/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/10/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/15/2015	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
BEALB391MW114	10/31/2011	ND	ND	<b>0.97</b>	ND	ND	ND	ND	ND	ND	ND
	7/29/2013	ND	ND	<b>6.6</b>	ND	ND	ND	ND	ND	ND	ND
	9/10/2014	ND	ND	<b>12</b>	ND	ND	ND	ND	ND	ND	ND
	9/14/2015	ND	NA	<b>0.51</b>	NA	NA	NA	NA	NA	NA	NA
BEALB391MW115	10/31/2011	ND	ND	<b>1.2</b>	ND	ND	ND	ND	ND	ND	ND
	7/29/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/10/2014	ND	ND	<b>0.89</b>	ND	ND	ND	ND	ND	ND	ND
	9/14/2015	ND	NA	<b>0.63</b>	NA	NA	NA	NA	NA	NA	NA
BEALB391MW116	10/31/2011	ND	ND	<b>33</b>	ND	ND	ND	ND	ND	ND	ND
	7/29/2013	ND	ND	<b>3.7</b>	ND	ND	ND	ND	ND	ND	ND
	9/10/2014	ND	ND	<b>0.57</b>	ND	ND	ND	ND	ND	ND	ND
	9/14/2015	ND	NA	<b>19</b>	NA	NA	NA	NA	NA	NA	NA

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 (SCDHEC, May 2015).

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of  $1 \times 10^{-6}$ , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

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.

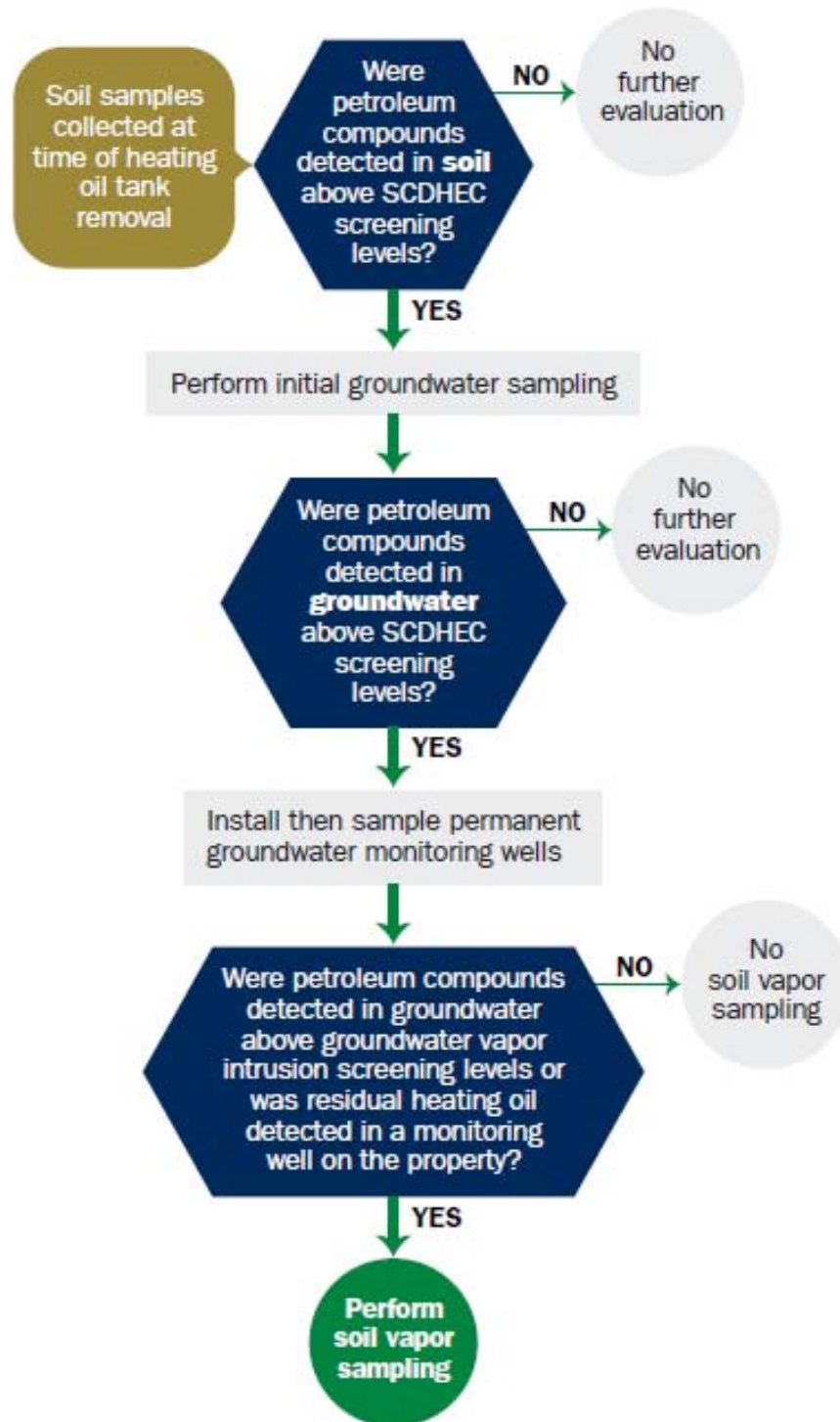
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

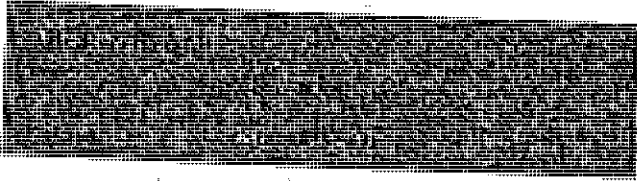
**Appendix A**  
**Multi-Media Selection Process for LBMH**



Appendix A - Multi-Media Selection Process for LBMH

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

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



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

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		
391 ACORN		
Street Address or State Road (as applicable)		
Beaufort, SC	29906	Beaufort
City	ZIP	County

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

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

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

My policy provider is: \_\_\_\_\_  
The policy deductible is: \_\_\_\_\_  
The policy limit is: \_\_\_\_\_

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

**And**

I do (circle one) wish to participate in the Superb Program.

IV. CERTIFICATION (To be signed by the UST owner/operator.)  
that I have personally examined and am satisfied that the UST meets the requirements of the UST Regulations.

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/T- \_\_\_\_\_

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
#2					
DIESEL					
2800					
5000					
Steel					
63"					
N					
N					
Removed					
6-28-07					
Y					
Y					

Recycling - Scrap Steel

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

TREATMENT FACILITY - BROADHURST LANDFILL  
SOLIDIFICATION & SUBTILED LANDFILL

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

THE ENDS OF THE TANK HAD MANY SMALL HOLES SCATTERED AROUND.

## 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					
Y					
N					
N					

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

Pitting was apparent on Fill Pipe Stand -

## VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

# VIII. SITE CONDITIONS

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

# IX. SAMPLE INFORMATION

A.

SCDHEC Lab Certification Number DW: 84009002

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1	BOTTOM	S	SAND	63"	6-28-07 920	ECHEVARRA	
2	SIDE	S	SAND	52"	6-28-07 930	A. MANNING	N/D
3						A. MANNING	N/D
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% Sodium Bisulfate 1EA

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. RECE ORS

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

# SUMMARY OF ANALYSIS RESULTS

N/A

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

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

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

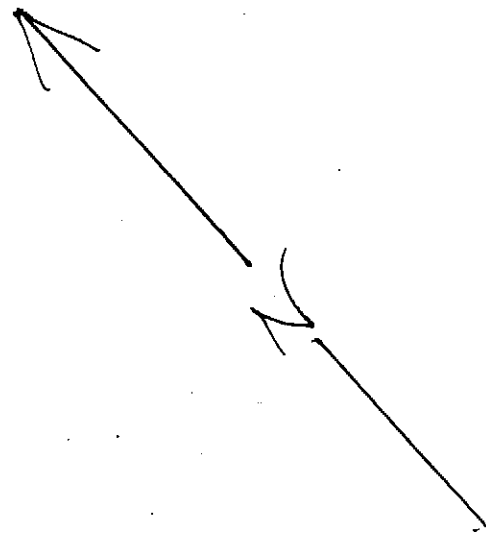
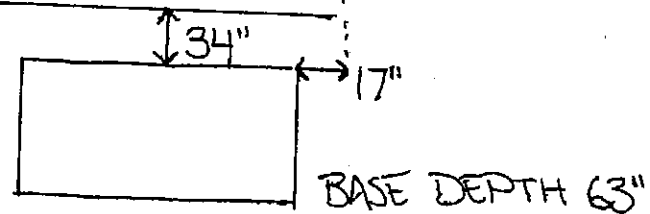
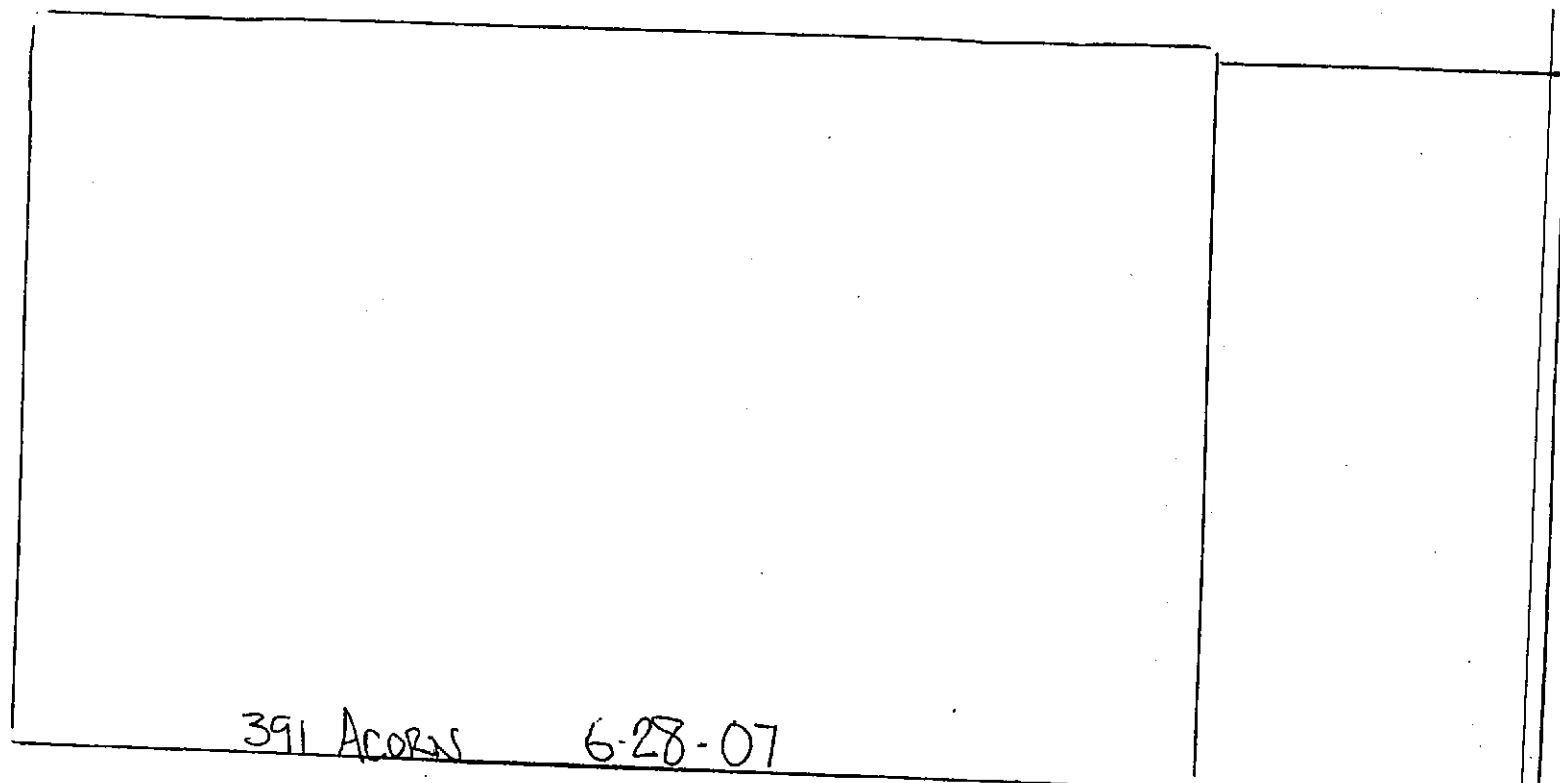
# SUMMARY OF ANALYSIS RESULTS (cont'd)

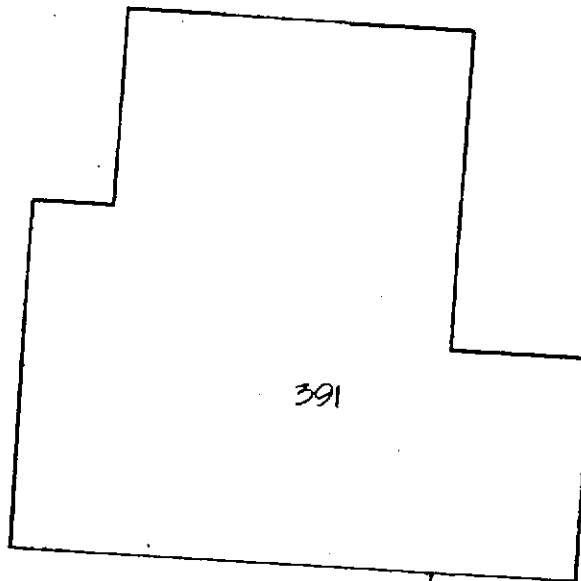
N/A

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

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







A B TANK 1 BASE 63"

ACORN DRIVE

TANK 1 EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 48"

B-SOIL TEST BOTTOM SAMPLE @ 63"



CUSTOMER:

BEAUFORT MILITARY COMPLEX FAMILY HOUSING

SITE ADDRESS:

391 ACORN DRIVE

SCALE:

1/16" = 1'-0"

SUPPLIER:

EPG INC.

DATE:

9/27/2007

EPG INC.

P.O. BOX 1096

MOUNT PLEASANT, SC 29465-1096

06.28.2007 10:22

399 A-04

06.28.2007 16:28

391. Acoen

## **ANALYTICAL RESULTS**

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

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

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

Work Order: OQH0084  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 07/30/07-07/3  
Received: 08/03/07

Sample ID: 389 ACORN SID-02 - Lab Number: OQH0084-02 - Matrix: Solid/Soil

LABORATORY REPORT

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Volatile Organic Compounds by EPA Method 8260B - Cont.</b>											
11-20-3	Naphthalene	7.81									
08-88-3	Toluene	5.15	Y	ug/kg dry	0.942	1.71	1	08/04/07 21:03	JWT	EPA 8260B	7H04004
330-20-7	Xylenes, total	3.48	Y	ug/kg dry	1.47	1.71	1	08/04/07 21:03	JWT	EPA 8260B	7H04004
	surrogate: 1,2-Dichloroethane-d4 (73-137%)	125 %	Y	ug/kg dry	0.886	1.71	1	08/04/07 21:03	JWT	EPA 8260B	7H04004
	surrogate: 4-Bromofluorobenzene (59-118%)	95 %									
	surrogate: Dibromofluoromethane (55-145%)	107 %									
	surrogate: Toluene-d8 (80-117%)	98 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
3-32-9	Acenaphthene	91.9	Y,U	ug/kg dry	91.9	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
08-96-8	Acenaphthylene	121	Y,U	ug/kg dry	121	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
20-12-7	Anthracene	66.1	Y,U	ug/kg dry	66.1	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
5-55-3	Benzo (a) anthracene	22.5	Y,U	ug/kg drv	22.5	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
35-99-2	Benzo (b) fluoranthene	21.8	Y,U	ug/kg dry	21.8	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
37-08-9	Benzo (k) fluoranthene	21.8	Y,U	ug/kg dry	21.8	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
31-24-2	Benzo (g,h,i) perylene	21.5	Y,U	ug/kg dry	21.5	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
3-32-8	Benzo (a) pyrene	25.5	Y,U	ug/kg dry	25.5	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
1-12-0	1-Methylnaphthalene	104	Y,U	ug/kg dry	104	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
8-01-9	Chrysene	24.8	Y,U	ug/kg dry	24.8	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
1-70-3	Dibenz (a,h) anthracene	27.2	Y,U	ug/kg dry	27.2	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
16-44-0	Fluoranthene	29.8	Y,U	ug/kg dry	29.8	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
73-7	Fluorene	81.2	Y,U	ug/kg dry	81.2	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
3-39-5	Indeno (1,2,3-cd) pyrene	26.9	Y,U	ug/kg dry	26.9	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
57-6	2-Methylnaphthalene	88.4	Y,U	ug/kg dry	88.4	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
20-3	Naphthalene	83.3	Y,U	ug/kg dry	83.3	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
01-8	Phenanthrene	48.9	Y,U	ug/kg dry	48.9	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
9-00-0	Pyrene	42.1	Y,U	ug/kg dry	42.1	207	1	08/12/07 12:46	REM	EPA 8270C	7H09030
	surrogate: 2-Fluorobiphenyl (24-121%)	62 %									
	surrogate: Nitrobenzene-d5 (19-111%)	62 %									
	surrogate: Terphenyl-d14 (44-171%)	100 %									

Sample ID: 391 ACORN BOT-01 - Lab Number: OQH0084-03 - Matrix: Solid/Soil

LABORATORY REPORT

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	77.5		%	0.100	0.100	1	08/06/07 15:25	RRP	EPA 160.3	7H06025
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
43-2	Benzene	0.842	Y,I	ug/kg dry	0.513	1.40	1	08/04/07 23:33	JWT	EPA 8260B	7H04004
41-4	Ethylbenzene	0.673	Y,I	ug/kg dry	0.593	1.40	1	08/04/07 23:33	JWT	EPA 8260B	7H04004
10-3	Naphthalene	0.775	Y,U	ug/kg dry	0.775	1.40	1	08/04/07 23:33	JWT	EPA 8260B	7H04004
88-3	Toluene	3.09	Y	ug/kg dry	1.21	1.40	1	08/04/07 23:33	JWT	EPA 8260B	7H04004
20-7	Xylenes, total	2.22	Y	ug/kg dry	0.728	1.40	1	08/04/07 23:33	JWT	EPA 8260B	7H04004
	surrogate: 1,2-Dichloroethane-d4 (73-137%)	131 %									

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

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

Work Order: OQH0084  
Project: LAUREL BAY  
Project Number: EP2362

Sampled: 07/30/07-07/31/07  
Received: 08/03/07

## LABORATORY REPORT

Sample ID: 391 ACRON BOT-01 - Lab Number: OQH0084-03 - Matrix: Solid/Soil

AS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Volatile Organic Compounds by EPA Method 8260B - Cont.</b>											
	rogate: 4-Bromofluorobenzene (59-118%)	93 %									
	rogate: Dibromofluoromethane (55-145%)	107 %									
	rogate: Toluene-d8 (80-117%)	98 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
32-9	Acenaphthene	95.5	Y,U	ug/kg dry	95.5	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
3-96-8	Acenaphthylene	126	Y,U	ug/kg dry	126	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
3-12-7	Anthracene	68.7	Y,U	ug/kg dry	68.7	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
5-5-3	Benzo (a) anthracene	52.9	Y,I	ug/kg dry	23.3	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
5-99-2	Benzo (b) fluoranthene	58.5	Y,I	ug/kg dry	22.7	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
7-08-9	Benzo (k) fluoranthene	26.2	Y,I	ug/kg dry	22.7	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
1-24-2	Benzo (g,h,i) perylene	22.4	Y,U	ug/kg dry	22.4	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
32-8	Benzo (a) pyrene	38.7	Y,I	ug/kg dry	26.5	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
12-0	1-Methylnaphthalene	108	Y,U	ug/kg dry	108	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
1-01-9	Chrysene	54.6	Y,I	ug/kg dry	25.8	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
70-3	Dibenz (a,h) anthracene	28.3	Y,U	ug/kg dry	28.3	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
1-44-0	Fluoranthene	72.3	Y,I	ug/kg dry	31.0	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
73-7	Fluorene	84.3	Y,U	ug/kg dry	84.3	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
3-39-5	Indeno (1,2,3-cd) pyrene	27.9	Y,U	ug/kg dry	27.9	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
57-6	2-Methylnaphthalene	91.9	Y,U	ug/kg dry	91.9	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
20-3	Naphthalene	86.5	Y,U	ug/kg dry	86.5	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
11-8	Phenanthrene	92.9	Y,I	ug/kg dry	50.8	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
00-0	Pyrene	88.2	Y,I	ug/kg dry	43.8	215	1	08/12/07 13:08	REM	EPA 8270C	7H09030
	rogate: 2-Fluorobiphenyl (24-121%)	58 %									
	rogate: Nitrobenzene-d5 (19-111%)	60 %									
	rogate: Terphenyl-d14 (44-171%)	102 %									

## LABORATORY REPORT

Sample ID: 391 ACRON SID-02 - Lab Number: OQH0084-04 - Matrix: Solid/Soil

S #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	85.7		%	0.100	0.100	1	08/06/07 15:25	RRP	EPA 160.3	7H06026
<b>Volatile Organic Compounds by EPA Method 8260B</b>											
1-2	Benzene	0.553	Y,U	ug/kg dry	0.553	1.51	1	08/04/07 23:50	JWT	EPA 8260B	7H04004
11-4	Ethylbenzene	0.696	Y,I	ug/kg dry	0.640	1.51	1	08/04/07 23:50	JWT	EPA 8260B	7H04004
1-3	Naphthalene	4.63	Y	ug/kg dry	0.835	1.51	1	08/04/07 23:50	JWT	EPA 8260B	7H04004
18-3	Toluene	3.39	Y	ug/kg dry	1.31	1.51	1	08/04/07 23:50	JWT	EPA 8260B	7H04004
20-7	Xylenes, total	2.36	Y	ug/kg dry	0.785	1.51	1	08/04/07 23:50	JWT	EPA 8260B	7H04004
	rogate: 1,2-Dichloroethane-d4 (73-137%)	114 %									
	rogate: 4-Bromofluorobenzene (59-118%)	96 %									
	rogate: Dibromofluoromethane (55-145%)	106 %									
	rogate: Toluene-d8 (80-117%)	98 %									

## Polynuclear Aromatic Hydrocarbons by EPA Method 8270

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

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

OQH0084

Project:

LAUREL BAY

Project Number:

EP2362

Sampled: 07/30/07-07/31/07

Received: 08/03/07

## LABORATORY REPORT

Sample ID: 391 ACRON SID-02 - Lab Number: OQH0084-04 - Matrix: Solid/Soil

AS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
-32-9	Acenaphthene	86.4	Y,U	ug/kg dry	86.4	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
8-96-8	Acenaphthylene	114	Y,U	ug/kg dry	114	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
0-12-7	Anthracene	62.2	Y,U	ug/kg dry	62.2	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
-55-3	Benzo (a) anthracene	255	Y	ug/kg dry	21.1	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
5-99-2	Benzo (b) fluoranthene	333	Y	ug/kg dry	20.5	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
7-08-9	Benzo (k) fluoranthene	128	Y,I	ug/kg dry	20.5	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
1-24-2	Benzo (g,h,i) perylene	253	Y	ug/kg dry	20.2	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
32-8	Benzo (a) pyrene	163	Y,I	ug/kg dry	24.0	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
12-0	1-Methylnaphthalene	97.9	Y,U	ug/kg dry	97.9	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
1-01-9	Chrysene	23.3	Y,U	ug/kg dry	23.3	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
70-3	Dibenz (a,h) anthracene	75.1	Y,I	ug/kg dry	25.6	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
-44-0	Fluoranthene	28.0	Y,U	ug/kg dry	28.0	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
73-7	Fluorene	76.3	Y,U	ug/kg dry	76.3	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
-39-5	Indeno (1,2,3-cd) pyrene	269	Y	ug/kg dry	25.2	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
57-6	2-Methylnaphthalene	83.1	Y,U	ug/kg dry	83.1	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
20-3	Naphthalene	78.3	Y,U	ug/kg dry	78.3	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
011-8	Phenanthrene	46.0	Y,U	ug/kg dry	46.0	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
-00-0	Pyrene	39.6	Y,U	ug/kg dry	39.6	195	1	08/12/07 13:30	REM	EPA 8270C	7H09030
rogate: 2-Fluorobiphenyl (24-121%)		58 %									
rogate: Nitrobenzene-d5 (19-111%)		64 %									
rogate: Terphenyl-d14 (44-171%)		115 %									

## LABORATORY REPORT

Sample ID: 398 ACRON BOT-01 - Lab Number: OQH0084-05 - Matrix: Solid/Soil

S #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>General Chemistry Parameters</b>											
	% Solids	77.8		%	0.100	0.100	1	08/06/07 15:25	RRP	EPA 160.3	7H06026
<b>Stable Organic Compounds by EPA Method 8260B</b>											
1-2	Benzene	0.476	Y,I	ug/kg dry	0.396	1.08	1	08/05/07 00:07	JWT	EPA 8260B	7H04004
11-4	Ethylbenzene	0.585	Y,I	ug/kg dry	0.458	1.08	1	08/05/07 00:07	JWT	EPA 8260B	7H04004
1-3	Naphthalene	3.62	Y	ug/kg dry	0.598	1.08	1	08/05/07 00:07	JWT	EPA 8260B	7H04004
18-3	Toluene	2.90	Y	ug/kg dry	0.935	1.08	1	08/05/07 00:07	JWT	EPA 8260B	7H04004
20-7	Xylenes, total	2.01	Y	ug/kg dry	0.562	1.08	1	08/05/07 00:07	JWT	EPA 8260B	7H04004
rogate: 1,2-Dichloroethane-d4 (73-137%)		122 %									
rogate: 4-Bromofluorobenzene (59-118%)		91 %									
rogate: Dibromofluoromethane (55-145%)		105 %									
rogate: Toluene-d8 (80-117%)		97 %									
<b>Polynuclear Aromatic Hydrocarbons by EPA Method 8270</b>											
-9	Acenaphthene	776	Y	ug/kg dry	95.2	215	1	08/12/07 13:52	REM	EPA 8270C	7H09030
5-8	Acenaphthylene	126	Y,U	ug/kg dry	126	215	1	08/12/07 13:52	REM	EPA 8270C	7H09030
2-7	Anthracene	211	Y,I	ug/kg dry	68.5	215	1	08/12/07 13:52	REM	EPA 8270C	7H09030
3	Benzo (a) anthracene	223	Y	ug/kg dry	23.3	215	1	08/12/07 13:52	REM	EPA 8270C	7H09030

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



# Test America

ANALYTICAL TESTING CORPORATION

0640084 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

Address: \_\_\_\_\_

Client #: 2411

City/State/Zip Code: \_\_\_\_\_

Project Manager: JOHN MATTAWAY

Telephone Number: 813-881-0167

Fax: 813-881-7766

Sampler Name: (Print Name) JOHN MATTAWAY

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 Needed:	Fax Results: Y N	SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix		Preservation		# of Containers		Analyze For:	QC Deliverables	REMARKS
								SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specify Other	HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol			
			389 Acorn Bot-01	7/31/07	9:10	G		S						BTEX + NAPTH 8260		
			389 Acorn Sid-02	"	9:20	C		S						PAH 8270		
			391 Acorn Bot-01	"	10:10	G		S								
			391 Acorn Sid-02	"	10:15	C		S								
			398 Acorn Bot-01	"	10:50	G		S								
			398 Acorn Sid-02	"	10:55	C		S								
			398 Acorn Bot-03	"	11:10	G		S								
			398 Acorn Sid-04	"	11:15	C		S								
			294 Birch Bot-01	7/31/07	9:30	G		S								
			294 Birch Sid-02	7/31/07	09:35	C		S								

Special Instructions: \_\_\_\_\_

Relinquished By: [Signature]

Date: 8/2/07

Time: 14:00

Received By: [Signature]

Date: 8/2/07

Time: 14:00

Relinquished By: [Signature]

Date: 8/2/07

Time: 1730

Received By: [Signature]

Date: 8/3/07

Time: 9:15

Relinquished By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

LABORATORY COMMENTS:

Init Lab Temp: 24.3

Rec Lab Temp: \_\_\_\_\_

Custody Seals: Y N N/A

Bottles Supplied by Test America: Y N

Method of Shipment: Fed Ex

## ANALYTICAL TESTING CORPORATION

Client Name EPG

**Address:**

Client #: 2491

City/State/Zip Code:

Project Manager: JOHN MATTHEWS

Telephone Number: 843 881-0607

Sampler Name: (Print Name) JOHN MARY

Sampler Signature: 

Project Name: Langel Bay

Project #: EP 2362

Site/Location ID: \_\_\_\_\_ State: \_\_\_\_\_

Report To: \_\_\_\_\_ State: \_\_\_\_\_

Invoice To: \_\_\_\_\_

Quote #: \_\_\_\_\_ PO#: \_\_\_\_\_

PO#:

Analyze For:

**QC Deliverables**

None

~~X~~ Level 2.

(Batch QC)

### Level 3

### Level 4

Other:

REMARKS

[illegible]

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



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

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

## ANALYTICAL RESULTS

Project: LAUREL BAY SAMPLING 7/29/08  
Pace Project No.: 9224564

Sample: 389 ACORN A		Lab ID: 9224564013	Collected: 07/29/08 14:40	Received: 07/31/08 13:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Dibromofluoromethane (S)	96 %		85-115	1		08/05/08 22:17	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		79-120	1		08/05/08 22:17	17060-07-0	
Toluene-d8 (S)	100 %		70-120	1		08/05/08 22:17	2037-26-5	

Sample: 391 ACORNA A		Lab ID: 9224564014	Collected: 07/29/08 15:50	Received: 07/31/08 13:40	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	5.1 ug/L		4.0	1	08/04/08 00:00	08/13/08 04:27	83-32-9	
Acenaphthylene	ND ug/L		3.0	1	08/04/08 00:00	08/13/08 04:27	208-96-8	
Anthracene	ND ug/L		0.10	1	08/04/08 00:00	08/13/08 04:27	120-12-7	
Benzo(a)anthracene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 04:27	56-55-3	
Benzo(a)pyrene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.60	1	08/04/08 00:00	08/13/08 04:27	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	207-08-9	
Chrysene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 04:27	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	53-70-3	
Fluoranthene	ND ug/L		0.60	1	08/04/08 00:00	08/13/08 04:27	206-44-0	
Fluorene	2.4 ug/L		0.62	1	08/04/08 00:00	08/13/08 04:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	193-39-5	
1-Methylnaphthalene	ND ug/L		4.0	1	08/04/08 00:00	08/13/08 04:27	90-12-0	
2-Methylnaphthalene	ND ug/L		4.0	1	08/04/08 00:00	08/13/08 04:27	91-57-6	
Naphthalene	ND ug/L		3.0	1	08/04/08 00:00	08/13/08 04:27	91-20-3	
Phenanthrene	ND ug/L		0.40	1	08/04/08 00:00	08/13/08 04:27	85-01-8	
Pyrene	ND ug/L		0.20	1	08/04/08 00:00	08/13/08 04:27	129-00-0	
Nitrobenzene-d5 (S)	55 %		50-150	1	08/04/08 00:00	08/13/08 04:27	4165-60-0	
2-Fluorobiphenyl (S)	89 %		50-150	1	08/04/08 00:00	08/13/08 04:27	321-60-8	
Terphenyl-d14 (S)	118 %		50-150	1	08/04/08 00:00	08/13/08 04:27	1718-51-0	

8260 MSV Low Level		Analytical Method: EPA 8260						
Benzene	ND ug/L		1.0	1		08/05/08 22:41	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		08/05/08 22:41	100-41-4	
Naphthalene	118 ug/L		2.0	1		08/05/08 22:41	91-20-3	
Toluene	ND ug/L		1.0	1		08/05/08 22:41	108-88-3	
m&p-Xylene	ND ug/L		2.0	1		08/05/08 22:41	1330-20-7	
o-Xylene	ND ug/L		1.0	1		08/05/08 22:41	95-47-6	
4-Bromofluorobenzene (S)	98 %		87-109	1		08/05/08 22:41	460-00-4	
Dibromofluoromethane (S)	96 %		85-115	1		08/05/08 22:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		79-120	1		08/05/08 22:41	17060-07-0	
Toluene-d8 (S)	101 %		70-120	1		08/05/08 22:41	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  
PAGE 5 OF 12

		391 Acorn Drive				
LOCATION	South Carolina	LBMW113	LBMW114	LBMW115	LBMW116	LBMW116
SAMPLE ID	State Screening	BEA-LB391GW1130210	BEA-LB391GW1140210	BEA-LB391GW1150210	BEA-LB391GW1160210	BEA-LB391GW1160210-D
SAMPLE DATE	Values <sup>(1)</sup>	20100223	20100223	20100224	20100224	20100224
PAHS (UG/L)						
1-METHYLNAPHTHALENE	10	0.566 U	0.298 J	0.632 U	0.659 U	0.659 U
2-METHYLNAPHTHALENE	10	0.566 U	0.334 J	0.632 U	0.659 U	0.659 U
ACENAPHTHENE	NC	0.328 J	3.26	0.653 U	0.703 J	0.469 J
ACENAPHTHYLENE	NC	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
ANTHRACENE	NC	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
BENZO(A)ANTHRACENE	10	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
BENZO(A)PYRENE	10	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
BENZO(B)FLUORANTHENE	10	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
BENZO(G,H,I)PERYLENE	NC	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
BENZO(K)FLUORANTHENE	10	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
CHRYSENE	10	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
DIBENZO(A,H)ANTHRACENE	10	0.377 UJ	0.377 UJ	0.421 U	0.44 U	0.44 U
FLUORANTHENE	NC	0.377 U	0.459 J	0.421 U	0.44 U	0.44 U
FLUORENE	NC	0.377 U	2.31	0.421 U	0.269 J	0.44 U
INDENO(1,2,3-CD)PYRENE	NC	0.377 U	0.377 U	0.421 U	0.44 U	0.44 U
PHENANTHRENE	NC	0.377 U	0.96	0.421 U	0.44 U	0.44 U
PYRENE	NC	0.566 U	0.566 U	0.632 U	0.659 U	0.659 U
VOCS (UG/L)						
BENZENE	5	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
ETHYLBENZENE	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER <sup>(2)</sup>	40					
NAPHTHALENE	25	0.5 U	11.8	3.59	2.41	2.48
TOLUENE	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TOTAL XYLENES	10000	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U

**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  
PAGE 1 OF 11

Parameter	Criteria <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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 <sup>(1)</sup>	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  
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Parameter	Criteria <sup>(1)</sup>	1472 CARDINAL			
		LBMW130		LBMW131	LBMW132
		BEALB-1472-GW-MW130-1111 20111110 GW	BEALB-1472-GW-MW130-1111-D 20111110 GW	BEALB-1472-GW-MW131-1111 20111110 GW	BEALB-1472-GW-MW132-1111 20111115 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  
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Parameter	Criteria <sup>(1)</sup>	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**

<b>LBMH Area Address</b> <b>Well ID</b> <b>Sample ID</b> <b>Lab Sample ID</b> <b>Date Collected</b>	<b>SCDHEC</b> <b>RBSL<sup>1</sup></b>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>LBMH Area Address</b> <b>Well ID</b> <b>Sample ID</b> <b>Lab Sample ID</b> <b>Date Collected</b>					
<b>SCDHEC</b> <b>RBSL<sup>1</sup></b>		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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>LBMH Area Address</b> <b>Well ID</b> <b>Sample ID</b> <b>Lab Sample ID</b> <b>Date Collected</b>					
<b>SCDHEC</b> <b>RBSL<sup>1</sup></b>		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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>LBMH Area Address</b> <b>Well ID</b> <b>Sample ID</b> <b>Lab Sample ID</b> <b>Date Collected</b>					
<b>SCDHEC</b> <b>RBSL<sup>1</sup></b>		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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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 J/	< 0.50	< 0.50	< 0.50
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	700	< 0.50	<b>2.5</b>	<b>4.4</b>	< 0.50
Naphthalene	25	<b>3.6</b>	<b>25</b>	<b>42</b>	< 0.50
Toluene	1,000	< 0.50	< 0.50	<b>0.20</b> J/	< 0.50
Xylenes, Total	10,000	< 0.50	<b>0.62</b>	<b>6.3</b>	< 0.50
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	<b>0.32</b> J/	<b>3.3</b>	<b>3.2</b>	< 0.25
Ethylbenzene	700	<b>18</b>	<b>13</b>	<b>13</b>	< 0.25
Naphthalene	25	<b>73</b>	<b>37</b>	<b>37</b>	< 0.25
Toluene	1,000	<b>2.1</b>	<b>0.33</b> J/	<b>0.32</b> J/	< 0.25
Xylenes, Total	10,000	<b>35</b>	<b>19</b>	<b>18</b>	< 0.25
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.25	< 0.25	< 0.25	< 0.25
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 0.25
Naphthalene	25	< 0.25	<b>3.8</b>	<b>4.1</b>	< 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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	1472 Cardinal Lane MW145 BEALB1472MW145WG20130801 OH01003-021 08/01/13
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>		
Benzene	5	< 0.50
Ethylbenzene	700	< 0.50
Naphthalene	25	< 0.50
Toluene	1,000	< 0.50
Xylenes, Total	10,000	< 0.50
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>		
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:**

<sup>1</sup> 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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	<b>0.76</b> J/	<b>0.76</b> J/	< 0.20	< 0.20
Naphthalene	25	<b>14</b>	<b>15</b>	< 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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	<b>2</b> J/
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	<b>14</b>
Naphthalene	25	< 0.20	< 0.20	< 0.20	<b>71</b>
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	<b>18</b>
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	< 0.20	<b>0.48</b> J/	<b>26</b>	< 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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	< 0.20	< 0.20	< 0.20	< 0.20
Naphthalene	25	<b>12</b>	<b>0.89</b> J/	<b>0.57</b> 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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	<b>0.40</b> J/	<b>0.41</b> J/
Ethylbenzene	700	< 0.20	< 0.20	<b>8.8</b>	<b>9.3</b>
Naphthalene	25	< 0.20	< 0.20	<b>41</b>	<b>45</b>
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	<b>18</b>	<b>19</b>
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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	<b>0.54</b> J/	<b>2.7</b>
Toluene	1,000	< 0.20	< 0.20	< 0.20	< 0.20
Xylenes, Total	10,000	< 0.40	< 0.40	< 0.40	< 0.40
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	< 0.40
Ethylbenzene	700	<b>0.33</b> J/	< 0.20	< 0.20	< 0.20
Naphthalene	25	<b>8.1</b>	< 0.20	<b>0.45</b> 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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	< 0.40	< 0.40	< 0.40	<b>0.19</b> J/
Ethylbenzene	700	< 0.20	<b>2.3</b>	<b>2.4</b>	<b>13</b>
Naphthalene	25	< 0.20	<b>15</b>	<b>18</b>	<b>54</b>
Toluene	1,000	<b>1.5</b>	< 0.20	< 0.20	<b>1.3</b>
Xylenes, Total	10,000	< 0.40	<b>1.1</b>	<b>2.5</b>	<b>25</b>
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
Benzene	5	<b>0.19</b> J/	<b>5.6</b>	<b>5.8</b>	< 0.40
Ethylbenzene	700	<b>12</b>	<b>17</b>	<b>19</b>	< 0.20
Naphthalene	25	<b>44</b>	<b>36</b>	<b>40</b>	< 0.20
Toluene	1,000	<b>1.3</b>	<b>0.40</b> J/	<b>0.42</b> J/	< 0.20
Xylenes, Total	10,000	<b>22</b>	<b>14</b> /J	<b>18</b>	< 0.40
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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 <sup>1</sup>	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
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>					
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
<b>Semivolatile Organic Compounds by Method 8270D (µg/L)</b>					
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:**

<sup>1</sup> 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.



**Table 4**  
**Summary of Analytical Results in Groundwater Samples - September 2015**  
**MCAS Beaufort - Laurel Bay**  
**Beaufort, South Carolina**

LBMH Area Address Well ID	SC RBSL	282 Birch Drive BEALB282MW136 WG20150915 QI15011-013 09/15/15	282 Birch Drive BEALB282MW137 WG20150915 QI15011-016 09/15/15	282 Birch Drive BEALB282MW138 WG20150915 QI15011-011 09/15/15	282 Birch Drive BEALB282MW139 WG20150915 QI15011-008 09/15/15	388 Acorn Drive BEALB388MW110 WG20150914 QI15011-007 09/14/15	388 Acorn Drive BEALB388MW111 WG20150914 QI15011-005 09/14/15	388 Acorn Drive BEALB388MW112 WG20150914 QI15011-001 09/14/15
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>								
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	<b>0.75 J/</b>	< 0.45	< 0.45
Naphthalene	25	<b>16</b>	< 0.96	<b>0.14 J/</b>	< 0.96	<b>49 B/J</b>	< 0.96	<b>6.8 B/J</b>

LBMH Area Address Well ID	SC RBSL	391 Acorn Drive BEALB391MW113 WG20150915 QI15011-010 09/15/15	391 Acorn Drive BEALB391MW114 WG20150914 QI15011-006 09/14/15	391 Acorn Drive BEALB391MW115 WG20150914 QI15011-004 09/14/15	391 Acorn Drive BEALB391MW116 WG20150914 QI15011-003 09/14/15	398 Acorn Drive BEALB398MW104 WG20150915 QI15011-017 09/15/15	398 Acorn Drive BEALB398MW105 WG20150915 QI15011-015 09/15/15	398 Acorn Drive BEALB398MW106 WG20150915 QI15011-012 09/15/15
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>								
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Naphthalene	25	< 0.96	<b>0.51 BJ/J</b>	<b>0.63 BJ/J</b>	<b>19 B/J</b>	< 0.96	<b>0.18 J/</b>	< 0.96

LBMH Area Address Well ID	SC RBSL	437 Elderberry Drive BEALB437MW133 WG20150915 QI15011-024 09/15/15	437 Elderberry Drive BEALB437MW134 WG20150915 QI15011-021 09/15/15	437 Elderberry Drive BEALB437MW135 WG20150915 QI15011-018 09/15/15	437 Elderberry Drive BEALB437MW140 WG20150915 QI15011-019 09/15/15	437 Elderberry Drive BEALB437MW141 WG20150915 QI15011-022 09/15/15	437 Elderberry Drive BEALB437MW142 WG20150915 QI15011-020 09/15/15	1054 Gardenia Drive BEALB1054MW1 WG20150916 QI17024-006 09/16/15
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>								
Benzene	5	<b>1.5 J/</b>	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Naphthalene	25	<b>180 B/J</b>	<b>0.86 J/</b>	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96

LBMH Area Address Well ID	SC RBSL	1054 Gardenia Drive BEALB1054MW2 WG20150916 QI17024-001 09/16/15	1054 Gardenia Drive BEALB1054MW4 WG20150916 QI17024-009 09/16/15	1054 Gardenia Drive BEALB1054MW7 WG20150916 QI17024-008 09/16/15	1054 Gardenia Drive BEALB1054MW127 WG20150916 QI17024-007 09/16/15	1054 Gardenia Drive BEALB1054MW128 WG20150916 QI17024-005 09/16/15	1054 Gardenia Drive BEALB1054MW129 WG20150916 QI17024-003 09/16/15
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Naphthalene	25	< 0.96	< 0.96	< 0.96	<b>17</b>	<b>23 B/J</b>	<b>54 B/J</b>

**Notes:**

NS - No Standard

SC RBSL - South Carolina Risk-Based Screening Level from South Carolina Risk-Based Corrective Action for Petroleum Releases (SCDHEC, May 2001).

Bold font indicates the analyte was detected.

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

**Flags:**

B/ - Detected in an associated blank as well as in the sample.

J/ - Estimated result less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL).

/J - Estimated detected result.

/UJ - Estimated non-detected result.

**Table 5**  
**Summary of Analytical Results in Groundwater Samples - November and December 2015**  
**MCAS Beaufort - Laurel Bay**  
**Beaufort, South Carolina**

LBMH Area Address	SC RBSL	119 Banyan Drive BEALB119MW01 WG20151211 QL11039-004 12/11/15	119 Banyan Drive BEALB119MW02 WG20151211 QL11039-003 12/11/15	119 Banyan Drive BEALB119MW03 WG20151211 QL11039-001 12/11/15	119 Banyan Drive BEALB119MW04 WG20151214 QL16007-001 12/14/15	128 Banyan Drive BEALB128MW01 WG20151214 QL16007-010 12/14/15	128 Banyan Drive BEALB128MW02 WG20151214 QL16007-008 12/14/15
Sample ID							
Lab Sample ID							
Date Collected							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	<b>0.68 J/</b>	< 0.45
Ethylbenzene	700	<b>5.0</b>	< 0.51	< 0.51	< 0.51	<b>6.5</b>	< 0.51
Naphthalene	25	<b>36 J/</b>	< 0.96	< 0.96	< 0.96	<b>29</b>	< 0.96
Toluene	1000	< 0.48	<b>0.31 J/</b>	< 0.48	< 0.48	<b>0.42 J/</b>	< 0.48
Xylenes, Total	10,000	<b>3.3 J/</b>	< 0.57	< 0.57	< 0.57	<b>21</b>	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	<b>0.065 J/</b>	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	<b>0.034 J/</b>	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	<b>0.079 J/J</b>	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address	SC RBSL	128 Banyan Drive BEALB128MW03 WG20151214 QL16007-006 12/14/15	128 Banyan Drive BEALB128MW04 WG20151214 QL16007-003 12/14/15	132 Banyan Drive BEALB132MW01 WG20151215 QL17067-001 12/15/15	132 Banyan Drive BEALB132MW02 WG20151215 QL16007-020 12/15/15	132 Banyan Drive BEALB132MW03 WG20151215 QL16007-017 12/15/15	132 Banyan Drive BEALB132MW04 WG20151215 QL16007-012 12/15/15
Sample ID							
Lab Sample ID							
Date Collected							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	<b>7.9</b>	<b>0.50 J/</b>	< 0.45	< 0.45
Ethylbenzene	700	< 0.51	< 0.51	<b>42</b>	< 0.51	< 0.51	< 0.51
Naphthalene	25	< 0.96	< 0.96	<b>150 J/</b>	<b>2.8 J/</b>	< 0.96	<b>0.47 J/</b>
Toluene	1000	< 0.48	<b>7.4</b>	< 0.48	< 0.48	< 0.48	< 0.48
Xylenes, Total	10,000	< 0.57	< 0.57	<b>39</b>	< 0.57	< 0.57	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080

**Table 5**  
**Summary of Analytical Results in Groundwater Samples - November and December 2015**  
**MCAS Beaufort - Laurel Bay**  
**Beaufort, South Carolina**

LBMH Area Address	SC RBSL	135 Birch Drive BEALB135MW01 WG20151215 QL16007-011 12/15/15	135 Birch Drive BEALB135MW02 WG20151214 QL16007-007 12/14/15	135 Birch Drive BEALB135MW03 WG20151214 QL16007-004 12/14/15	135 Birch Drive BEALB135MW04 WG20151214 QL16007-009 12/14/15	148 Laurel Bay Boulevard BEALB148MW01 WG20151216 QL17067-011 12/16/15	148 Laurel Bay Boulevard BEALB148MW02 WG20151216 QL17067-008 12/16/15
<b>Sample ID</b>							
<b>Lab Sample ID</b>							
<b>Date Collected</b>							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Ethylbenzene	700	<b>3.4</b> J/	< 0.51	< 0.51	< 0.51	<b>13</b>	<b>0.60</b> J/
Naphthalene	25	<b>79</b>	< 0.96	< 0.96	< 0.96	<b>110</b> /J	<b>48</b> /J
Toluene	1000	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	<b>0.24</b> J/
Xylenes, Total	10,000	<b>0.36</b> J/	< 0.57	< 0.57	< 0.57	<b>8.9</b>	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040	<b>0.045</b> J/	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040	<b>0.043</b> J/	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080 /UJ	< 0.080	< 0.080	< 0.080

LBMH Area Address	SC RBSL	148 Laurel Bay Boulevard BEALB148MW03 WG20151216 QL17067-005 12/16/15	148 Laurel Bay Boulevard BEALB148MW04 WG20151215 QL17067-003 12/15/15	156 Laurel Bay Boulevard BEALB156MW01 WG20151215 QL16007-018 12/15/15	156 Laurel Bay Boulevard BEALB156MW02 WG20151215 QL16007-013 12/15/15	156 Laurel Bay Boulevard BEALB156MW03 WG20151215 QL16007-015 12/15/15	156 Laurel Bay Boulevard BEALB156MW04 WG20151215 QL16007-014 12/15/15
<b>Sample ID</b>							
<b>Lab Sample ID</b>							
<b>Date Collected</b>							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Ethylbenzene	700	<b>0.56</b> J/	< 0.51	<b>9.2</b>	< 0.51	< 0.51	< 0.51
Naphthalene	25	<b>6.6</b> /J	< 0.96	<b>72</b>	< 0.96	< 0.96	< 0.96
Toluene	1000	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Xylenes, Total	10,000	< 0.57	< 0.57	<b>25</b>	< 0.57	< 0.57	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.20	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.20	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.20	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.20	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.40	< 0.080	< 0.080	< 0.080

**Table 5**  
**Summary of Analytical Results in Groundwater Samples - November and December 2015**  
**MCAS Beaufort - Laurel Bay**  
**Beaufort, South Carolina**

LBMH Area Address	SC RBSL	156 Laurel Bay Boulevard BEALB156MW05 WG20151215 QL16007-016 12/15/15	1033 Foxglove Street BEALB1033MW01 WG20151216 QL17067-006 12/16/15	1033 Foxglove Street BEALB1033MW02 WG20151216 QL17067-004 12/16/15	1033 Foxglove Street BEALB1033MW03 WG20151216 QL17067-009 12/16/15	1033 Foxglove Street BEALB1033MW04 WG20151215 QL16007-021 12/15/15	1055 Gardenia Drive BEALB1055MW01 WG20151216 QL17067-018 12/16/15
Sample ID							
Lab Sample ID							
Date Collected							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Ethylbenzene	700	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	3.6 J/
Naphthalene	25	< 0.96	1.1 J/J	< 0.96	0.30 J/J	0.71 J/	39 /J
Toluene	1000	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Xylenes, Total	10,000	< 0.57	< 0.57	< 0.57	< 0.57	< 0.57	0.32 J/
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080

LBMH Area Address	SC RBSL	1055 Gardenia Drive BEALB1055MW02 WG20151216 QL17067-017 12/16/15	1055 Gardenia Drive BEALB1055MW03 WG20151216 QL17067-015 12/16/15	1055 Gardenia Drive BEALB1055MW04 WG20151216 QL17067-013 12/16/15	1059 Gardenia Drive BEALB1059MW01 WG20151216 QL17067-010 12/16/15	1059 Gardenia Drive BEALB1059MW02 WG20151216 QL17067-012 12/16/15	1059 Gardenia Drive BEALB1059MW03 WG20151216 QL17067-014 12/16/15
Sample ID							
Lab Sample ID							
Date Collected							
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>							
Benzene	5	< 0.45	< 0.45	< 0.45	1.8 J/	< 0.45	< 0.45
Ethylbenzene	700	< 0.51	< 0.51	< 0.51	8.8	2.7 J/	< 0.51
Naphthalene	25	< 0.96	< 0.96	< 0.96	39 /J	10 /J	< 0.96
Toluene	1000	< 0.48	< 0.48	< 0.48	3.8 J/	< 0.48	< 0.48
Xylenes, Total	10,000	< 0.57	< 0.57	< 0.57	39	< 0.57	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>							
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080

**Table 5**  
**Summary of Analytical Results in Groundwater Samples - November and December 2015**  
**MCAS Beaufort - Laurel Bay**  
**Beaufort, South Carolina**

<b>LBMH Area Address</b>		1059 Gardenia Drive	1168 Jasmine Street	1168 Jasmine Street	1168 Jasmine Street	1168 Jasmine Street
<b>Sample ID</b>	<b>SC</b>	BEALB1059MW04	BEALB1168MW01	BEALB1168MW02	BEALB1168MW03	BEALB1168MW04
<b>Lab Sample ID</b>	<b>RBSL</b>	WG20151216	WG20151217	WG20151217	WG20151217	WG20151217
<b>Date Collected</b>		QL17067-016	QL17067-021	QL17067-019	QL17067-020	QL17067-023
		12/16/15	12/17/15	12/17/15	12/17/15	12/17/15
<b>Volatile Organic Compounds by Method 8260B (µg/L)</b>						
Benzene	5	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Ethylbenzene	700	< 0.51	<b>0.71 J/J</b>	< 0.51	< 0.51	< 0.51
Naphthalene	25	< 0.96	<b>1.9 J/J</b>	< 0.96	< 0.96	< 0.96
Toluene	1000	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48
Xylenes, Total	10,000	< 0.57	< 0.57	< 0.57	< 0.57	< 0.57
<b>Semi-Volatiles by Method 8270D_SIM (µg/L)</b>						
Benzo[a]anthracene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[b]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Benzo[k]fluoranthene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chrysene	10	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Dibenz[a,h]anthracene	10	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080

**Notes:**

SC RBSL - South Carolina Risk-Based Screening Level from South Carolina Risk-Based Corrective Action for Petroleum Releases (SCDHEC, May 2015)

Bold font indicates the analyte was detected.

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

**Flags:**

J/ - Estimated result less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL).

/J - Estimated detected result.

/UJ - Estimated non-detected result.

**Appendix F**  
**Regulatory Correspondence**

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



C. Earl Hunter, Commissioner

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

10 September 2008

BOARD:  
Henry C. Scott  
M. David Mitchell, MD  
Glenn A. McCall  
Coleman F. Buckhouse, MD

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

Re: MCAS – Laurel Bay Housing – 391 Acorn  
Site ID # 04048  
UST Closure Reports received 31 January 2008  
Beaufort County

Dear Mr. Broadfoot:

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

Additional assessment activities are required for this site. Specifically the Department requests that a groundwater sample be collected from this site. Please note, the Department approved a groundwater sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

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

Sincerely,

Michael Bishop, Hydrogeologist  
Groundwater Quality Section  
Bureau of Water

cc: Region 8 District EQC (via pdf)  
MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)  
Technical File (via pdf)



C. Earl Hunter, Commissioner

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

30 December 2008

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

Re: MCAS – Laurel Bay Housing – 391 Acorn  
**Site ID # 04048**  
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 28 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](mailto: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:  
Paul C. Aughtry, III  
Chairman  
Edwin H. Cooper, III  
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C. Earl Hunter, Commissioner

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Received 4/14/11  
BOARD:  
Henry C. Scott  
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](mailto: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.

50500

BOARD:

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C. Earl Hunter, Commissioner

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Henry C. Scott

M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

Bureau of Land and Waste Management  
Division of Waste Management

July 5, 2012

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  
Draft Report of Findings for Laurel Bay Military Housing Investigation of  
Potential Impacts to Groundwater from Former Heating Oil Underground  
Storage Tanks, Dated June 2012

282 Birch Road  
388 and 398 Acorn Drive  
437 and 441 Elderberry Drive  
1472 Cardinal Lane  
1054 Gardenia Drive

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Draft Report of Findings for Laurel Bay Military Housing Area on June 18, 2012. 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 documents the installation of additional permanent monitoring wells and updates the groundwater conditions at seven homes. Limited soil sampling, permanent and temporary monitoring wells had previously shown evidence of groundwater contamination related to the heating oil USTs at the homes. The Department agrees with the recommendation to continue annual monitoring of these wells and the wells located at 391 Acorn Drive.

23a

SCANNED

8-30-19 9th

Based on this review, the Department has generated the attached memorandum by Joe Bowers 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](mailto:petruslb@dhec.sc.gov).

Sincerely,



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

#### Attachments

cc: Joe Bowers, FFGS  
Russell Berry, EQC Region 8  
Dan Owens, NAVFAC SE  
Stephanie Warino, Tetra Tech



C. Earl Hunter, Commissioner

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

## **MEMORANDUM**

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

**FROM:** Joe B. Bowers, P.G., Manager  
Federal Facilities Groundwater Section  
Division of Hydrogeology  
Bureau of Land and Waste Management

**DATE:** July 5, 2012

**RE:** Marine Corps Air Station (MCAS)  
SC1 750 216 169  
Beaufort County

Review of the Report of Findings for November 2011 Laurel Bay Military Housing Area, Investigation of Potential Impacts to Groundwater – Former Heating Oil Underground Storage Tanks, dated June 2012

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 June 18, 2012. 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 documents the installation of additional permanent monitoring wells and collection of groundwater samples from monitoring wells located adjacent to homes in Laurel Bay.

Based on review of this document, the Federal Facilities Groundwater Section did not generate any comments. The MCAS should proceed with the proposals for groundwater monitoring as outlined in this report.

Should you have any questions regarding this review, you may contact me at (803) 896-4024 or [bowersjb@dhec.sc.gov](mailto:bowersjb@dhec.sc.gov).



Catherine E. Heigel, Director

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

Division of Waste Management  
Bureau of Land and Waste Management

February 22, 2016

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

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

Dear Mr. Drawdy,

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

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at [petruslb@dhec.sc.gov](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus  
RCRA Federal Facilities Section

*Attachment: Specific Property Recommendations*

Cc: Russell Berry, EQC Region 8 (via email)  
Shawn Dolan, Resolution Consultants (via email)  
Bryan Beck, NAVFAC MIDLANT (via email)  
Craig Ehde (via email)



### Draft Final Groundwater Monitoring Report

Continue Groundwater Monitoring recommendation	
282 Birch	437 Elderberry
388 Acorn	1054 Gardenia Drive
1472 Cardinal Lane**	
No Further Action recommendation and concurrence	
391 Acorn	398 Acorn

\*\* Resume when demolition is complete