

**SUMMARY REPORT
57 BANYAN DRIVE (FORMERLY 119 BANYAN 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

**SUMMARY REPORT
57 BANYAN DRIVE (FORMERLY 119 BANYAN 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**

Prepared by:

CDM - AECOM
Multimedia Joint Venture

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

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

Table of Contents

1.0 INTRODUCTION	1
1.1 BACKGROUND INFORMATION.....	1
1.2 UST REMOVAL AND ASSESSMENT PROCESS.....	2
2.0 SAMPLING ACTIVITIES AND RESULTS	3
2.1 UST REMOVAL AND SOIL SAMPLING	4
2.2 SOIL ANALYTICAL RESULTS.....	4
2.3 INITIAL GROUNDWATER SAMPLING	5
2.4 INITIAL GROUNDWATER ANALYTICAL RESULTS	5
2.5 PERMANENT WELL GROUNDWATER SAMPLING.....	6
2.6 PERMANENT WELL GROUNDWATER ANALYTICAL RESULTS.....	6
2.7 LONG TERM MONITORING	7
2.8 LONG TERM MONITORING ANALYTICAL RESULTS.....	7
2.9 SOIL GAS SAMPLING.....	7
2.10 SOIL GAS ANALYTICAL RESULTS	8
3.0 PROPERTY STATUS.....	8
4.0 REFERENCES	9

Tables

Table 1	Laboratory Analytical Results - Soil
Table 2	Laboratory Analytical Results - Initial Groundwater
Table 3	Laboratory Analytical Results - Permanent Monitoring Well Groundwater
Table 4	Laboratory Analytical Results - Long Term Monitoring
Table 5	Laboratory Analytical Results - Vapor

Appendices

Appendix A	Multi-Media Selection Process for LBMH
Appendix B	UST Assessment Report
Appendix C	Laboratory Analytical Report - Initial Groundwater
Appendix D	Laboratory Analytical Reports - Permanent Well Groundwater
Appendix E	Historical Groundwater Analytical Results
Appendix F	Laboratory Analytical Report - Vapor
Appendix G	Regulatory Correspondence

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
VI	vapor intrusion
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 57 Banyan Drive (Formerly 119 Banyan 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 multimedia 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 57 Banyan Drive (Formerly 119 Banyan Drive). The sampling activities at 57 Banyan Drive (Formerly 119 Banyan Drive) comprised a soil investigation, IGWA sampling, installation and sampling of four permanent monitoring wells, LTM sampling, and a vapor intrusion (VI) investigation. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 119 Banyan Drive* (MCAS Beaufort, 2009). The UST Assessment Report is provided in

Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the permanent well installations and initial sampling activities at this site are provided in the *Groundwater Assessment Report – November and December 2015* (Resolution Consultants, 2016). 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 *2018 Groundwater Monitoring Report* (Resolution Consultants, 2018). A comprehensive table of the historical groundwater analytical results for all permanent monitoring wells at the site through 2019 is presented in Appendix E. Details regarding the VI investigation at this site are provided in the *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018* (Resolution Consultants, 2018). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix F.

2.1 UST Removal and Soil Sampling

On February 17, 2009, a single 280 gallon heating oil UST was removed from the front landscaped area, adjacent to the porch at 57 Banyan Drive (Formerly 119 Banyan Drive). The former UST location is indicated on Figures 2 and 3 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 5'8" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST 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 57 Banyan Drive (Formerly 119 Banyan Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 12, 2009, SCDHEC requested an IGWA for 57 Banyan Drive (Formerly 119 Banyan Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix G.

2.3 Initial Groundwater Sampling

On July 18, 2013, a single temporary monitoring well was installed at 57 Banyan Drive (Formerly 119 Banyan 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 Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporary monitoring well. Following well installation and development, a groundwater sample was collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71.H-I (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – July 2013* (Resolution Consultants, 2015).

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 57 Banyan Drive (Formerly 119 Banyan 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 August 6, 2015, SCDHEC requested a permanent well be installed for 57 Banyan Drive (Formerly 119 Banyan Drive) to confirm the impact to groundwater detected in the temporary well sample. SCDHEC's request letter is provided in Appendix G.

2.5 Permanent Well Groundwater Sampling

In November 2015, four permanent monitoring wells were installed at 57 Banyan Drive (Formerly 119 Banyan 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, MW01, 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 Figures 2 and 3 of the UST Assessment Report (Appendix B). Three additional permanent wells (MW02, MW03 and MW04) were also installed around the property at 57 Banyan Drive (Formerly 119 Banyan Drive) to delineate potential contamination. Further details are provided in the *Groundwater Assessment Report – November and December 2015* (Resolution Consultants, 2016).

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 *Groundwater Assessment Report – November and December 2015* (Resolution Consultants, 2016).

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 laboratory analytical data reports are included in Appendix D.

The groundwater results collected from 57 Banyan Drive (Formerly 119 Banyan Drive) at MW01 were greater than the SCDHEC RBSLs (Table 3), which indicated that further investigation was required. In a letter dated July 21, 2016, SCDHEC requested that LTM be carried out for 57 Banyan Drive (Formerly 119 Banyan Drive) to continue to monitor the impact to groundwater detected in the permanent well sample (MW01). SCDHEC's request letter is provided in Appendix G.

2.7 Long Term Monitoring

The LTM program at 57 Banyan Drive (Formerly 119 Banyan Drive) consisted of annual groundwater sampling at the four permanent monitoring wells. LTM sampling activities were conducted annually from 2016 until 2018 at the referenced site. The latest groundwater sampling details are provided in the *2018 Groundwater Monitoring Report* (Resolution Consultants, 2018).

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 57 Banyan Drive (Formerly 119 Banyan Drive) are provided in the *2018 Groundwater Monitoring Report* (Resolution Consultants, 2018).

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 2018 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 57 Banyan Drive (Formerly 119 Banyan Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 4) during the 2016, 2017 and 2018 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.

2.9 Soil Gas Sampling

On May 2, 2017, a single temporary subsurface soil gas well was installed at 57 Banyan Drive (Formerly 119 Banyan Drive) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media, Revision 4* (Resolution Consultants, 2017). A near-slab subsurface soil gas well was placed near the house slab and in the same general location as the former heating oil UST. The former UST location is indicated on Figures

2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018* (Resolution Consultants, 2018).

The sampling strategy for this phase of the investigation required a one-time sampling event of the subsurface soil gas well. The subsurface soil gas well was sampled on May 8, 2017. A soil gas sample was collected and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of soil gas sampling, the temporary subsurface soil gas well was abandoned in accordance with the *UFP SAP for Vapor Media, Revision 4* (Resolution Consultants, 2017). Field forms are provided in the *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018* (Resolution Consultants, 2018).

2.10 Soil Gas Analytical Results

A summary of the laboratory analytical results and United States Environmental Protection Agency (USEPA) VISLs is presented in Table 5. A copy of the laboratory analytical data report is included in Appendix F.

The soil gas results collected from 57 Banyan Drive (Formerly 119 Banyan Drive) were below the USEPA VISLs, which indicated that the near-slab subsurface soil gas was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater collected from the permanent monitoring wells during the three most recent sampling events, SCDHEC made the determination that NFA was required for 57 Banyan Drive (Formerly 119 Banyan Drive). The NFA determination for groundwater was obtained in a letter dated September 24, 2018. Based on the analytical results for soil gas, it was determined that there was not a VI concern at this property and a recommendation was made for no additional VI assessment activities. SCDHEC approved the no further VI investigation recommendation for 57 Banyan Drive (Formerly 119 Banyan Drive) in a letter dated August 29, 2018. SCDHEC's letters are provided in Appendix G.

4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 119 Banyan Drive, Laurel Bay Military Housing Area*, April 2009.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report – July 2013 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2015.
- Resolution Consultants, 2016. *Groundwater Assessment Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2016.
- Resolution Consultants, 2017. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, Revision 4, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, May 2017.
- Resolution Consultants, 2018. *Letter Report Petroleum Vapor Intrusion Investigations – April 2017 through February 2018 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, July 2018.
- Resolution Consultants, 2018. *2018 Groundwater Monitoring Report for Laurel Bay Military Housing Area, Long-Term Monitoring (LTM), Revision 1, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, August 2018.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1*, February 2016.
-

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

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

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

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

Tables

Table 1
Laboratory Analytical Results - Soil
57 Banyan Drive (Formerly 119 Banyan Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 02/17/09
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.007	ND
Ethylbenzene	1.15	0.168
Naphthalene	0.036	4.99
Toluene	1.45	0.00355
Xylenes, Total	14.5	0.198
Semivolatile Organic Compounds Analyzed by EPA Method 8270C (mg/kg)		
Benzo(a)anthracene	0.066	ND
Benzo(b)fluoranthene	0.066	ND
Benzo(k)fluoranthene	0.066	ND
Chrysene	0.066	ND
Dibenz(a,h)anthracene	0.066	ND

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Initial Groundwater
57 Banyan Drive (Formerly 119 Banyan Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 07/18/2013
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	7.5
Naphthalene	25	29.33	58
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	8.5
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	0.11
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

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

Bold font indicates the analyte was detected.

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

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
57 Banyan Drive (Formerly 119 Banyan Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Samples Collected 12/11/15 and 12/14/15			
			MW01 12/11/15	MW02 12/11/15	MW03 12/11/15	MW04 12/14/15
Volatiles Organic Compounds Analyzed by EPA Method 8260B (µg/L)						
Benzene	5	16.24	ND	ND	ND	ND
Ethylbenzene	700	45.95	5.0	ND	ND	ND
Naphthalene	25	29.33	36	ND	ND	ND
Toluene	1000	105,445	ND	0.31	ND	ND
Xylenes, Total	10,000	2,133	3.3	ND	ND	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)						
Benzo(a)anthracene	10	NA	0.065	ND	ND	ND
Benzo(b)fluoranthene	10	NA	0.034	ND	ND	ND
Benzo(k)fluoranthene	10	NA	ND	ND	ND	ND
Chrysene	10	NA	0.079	ND	ND	ND
Dibenz(a,h)anthracene	10	NA	ND	ND	ND	ND

Notes:

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

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - not applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

Table 4
Laboratory Analytical Results - Long Term Monitoring
57 Banyan Drive (Formerly 119 Banyan Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent		Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenz(a,h) anthracene
SCDHEC RBSLs ⁽¹⁾ (µg/L)		5	700	25	1000	10,000	10	10	10	10	10
Site-Specific Groundwater VISLs ⁽²⁾ (µg/L)		16.24	45.95	29.33	105,445	2,133	N/A	N/A	N/A	N/A	N/A
Well ID	Sample Date										
BEALB119MW01	12/11/2015	ND	5.0	36	ND	3.3	0.065	0.034	ND	0.079	ND
	7/28/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/14/2017	ND	ND	ND	ND	ND	0.050	ND	ND	ND	ND
	1/23/2018	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
BEALB119MW02	12/11/2015	ND	ND	ND	0.31	ND	ND	ND	ND	ND	ND
	7/28/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/13/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/23/2018	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
BEALB119MW03	12/11/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7/28/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/13/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/23/2018	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
BEALB119MW04	12/14/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7/28/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/13/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/23/2018	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA

Notes:

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

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

Bold font indicates the analyte was detected.

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

JE - Johnson & Ettinger

N/A - not applicable

NA - not analyzed

ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). A comprehensive table of the historical groundwater analytical results for all permanent monitoring wells at the site through 2018 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

Table 5
Laboratory Analytical Results - Vapor
57 Banyan Drive (Formerly 119 Banyan Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	USEPA VISL ⁽¹⁾	Soil Gas Results Sample Collected 05/08/17
Volatile Organic Compounds Analyzed by USEPA Method TO-15 ($\mu\text{g}/\text{m}^3$)		
Benzene	12	ND
Toluene	17000	1.4
Ethylbenzene	37	ND
m,p-Xylenes	350	ND
o-Xylene	350	ND
Naphthalene	2.8	1.4

Notes:

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

VISLs are based on a residual exposure scenario and a target risk level of 1×10^{-6} and a hazard quotient of 0.1.

Bold font indicates the analyte was detected.

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

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

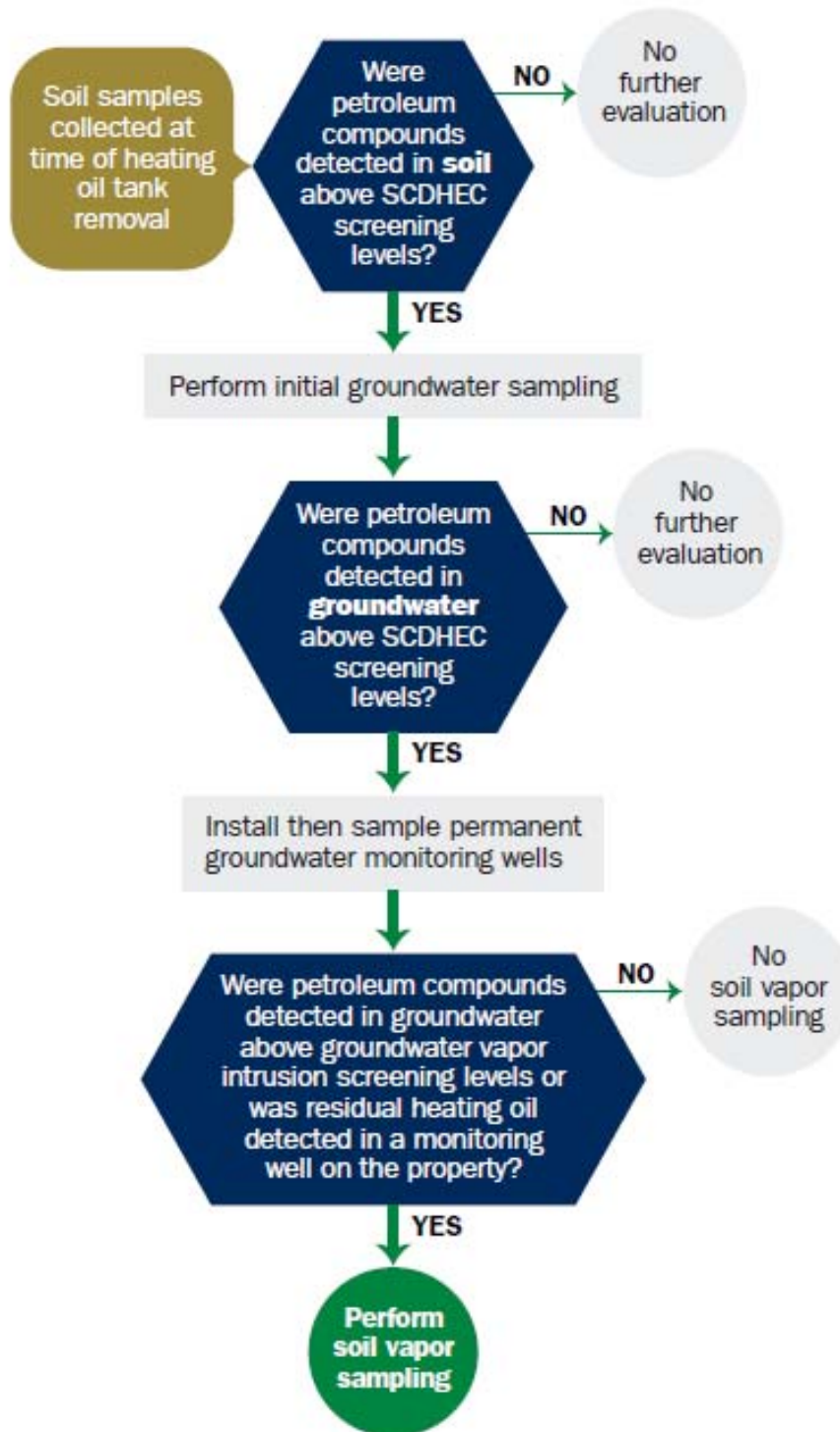
RBSL - Risk-Based Screening Level

$\mu\text{g}/\text{m}^3$ - micrograms per cubic meter

USEPA - United States Environmental Protection Agency

VISL - Vapor Intrusion Screening Level

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

0475

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

Date Received
State Use Only

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

RECEIVED

APR 24 2009

SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)		
Owner Name (Corporation, Individual, Public Agency, Other)		
P.O. Box 55001		
Mailing Address		
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #	
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC	
Facility Name or Company Site Identifier	
Laurel Bay Military Housing Area, 119 Banyan Street	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

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

Tank 1 119Banyan	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
heating oil					
280 gal					
Late 1950s					
steel					
mid 1980s					
5'8"					
No					
No					
Removed					
2/17/09					
Yes					
Yes					

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

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
 UST 119Banyan was filled with sand. See Attachment A for waste manifest.

O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
 Holes due to corrosion were found on seams at ends of the tank.

VII. PIPING INFORMATION

	Tank 1 119Banyan	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A. Construction Material..(ex. Steel, FRP).....	Steel /copper					
B. Distance from UST to Dispenser.....	N/A					
C. Number of Dispensers.....	N/A					
D. Type of System Pressure or Suction.....	Suction					
E. Was Piping Removed from the Ground? Y/N	Yes					
F. Visible Corrosion or Pitting Y/N.....	Yes					
G. Visible Holes Y/N.....	No					
H. Age.....	Early 1950s					

- I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.
Corrosion noted on exterior of steel pipe.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

	Yes	No	Unk
<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	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
119 1	Banyan Excav at fill end	Soil	Clay	5' 8"	2/17/09 1425 hrs	S. Pratt	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

XII. RECEPTORS

	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>		X
<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>		X
<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? *Sewer, water, electricity, cable, fiber optic</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	X*	
<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>		X

XIII. SITE MAP

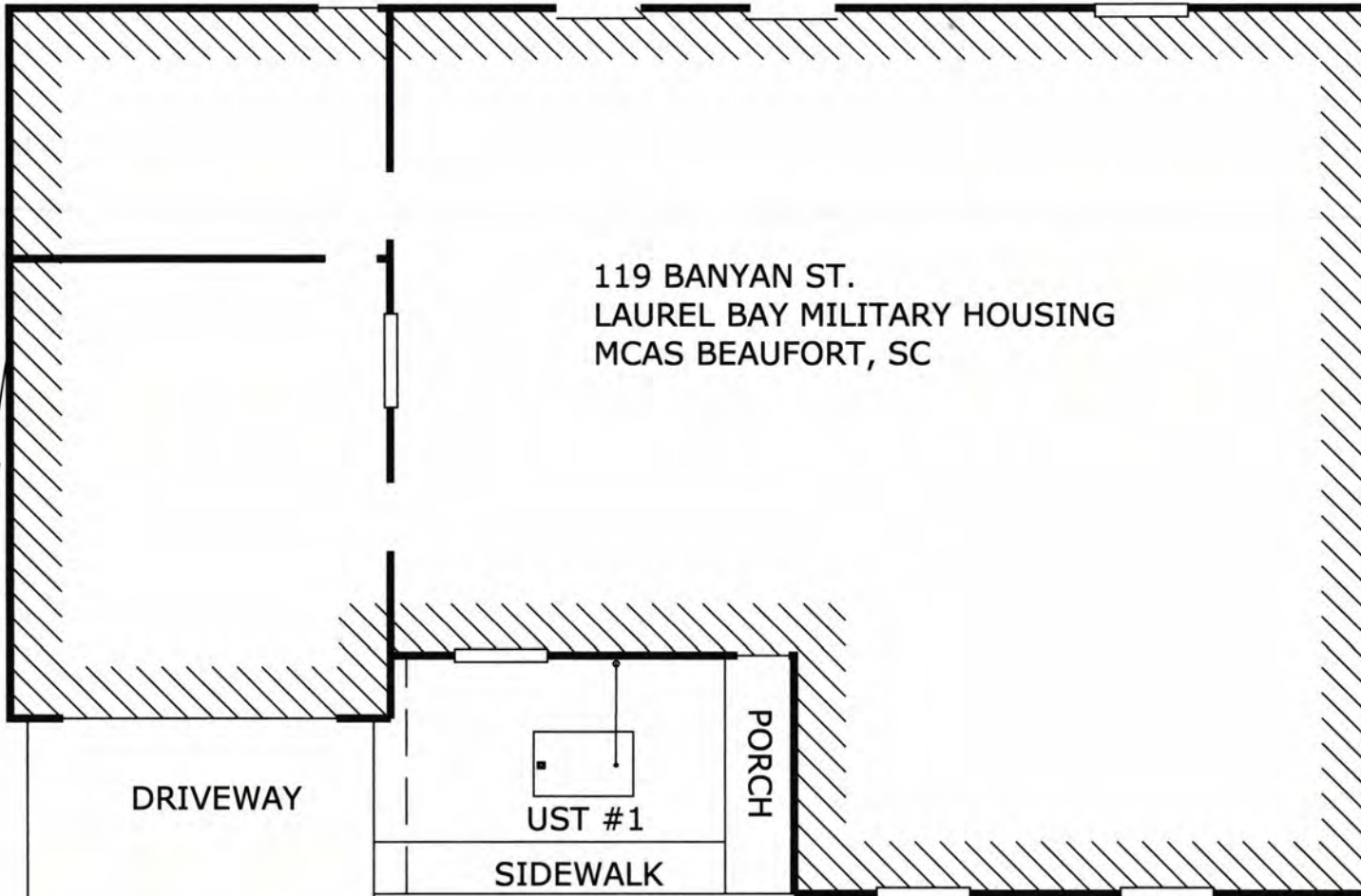
You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)

↑ 595' BROAD RIVER



119 BANYAN ST.
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC



DRIVEWAY

UST #1

PORCH

SIDEWALK

WASTE WATER

POWER POLE

GRAPHIC SCALE

0 5' 10' 20'

SBG

10179 HWY 78
LADSON, SC 29456

ph. (843) 879-0400

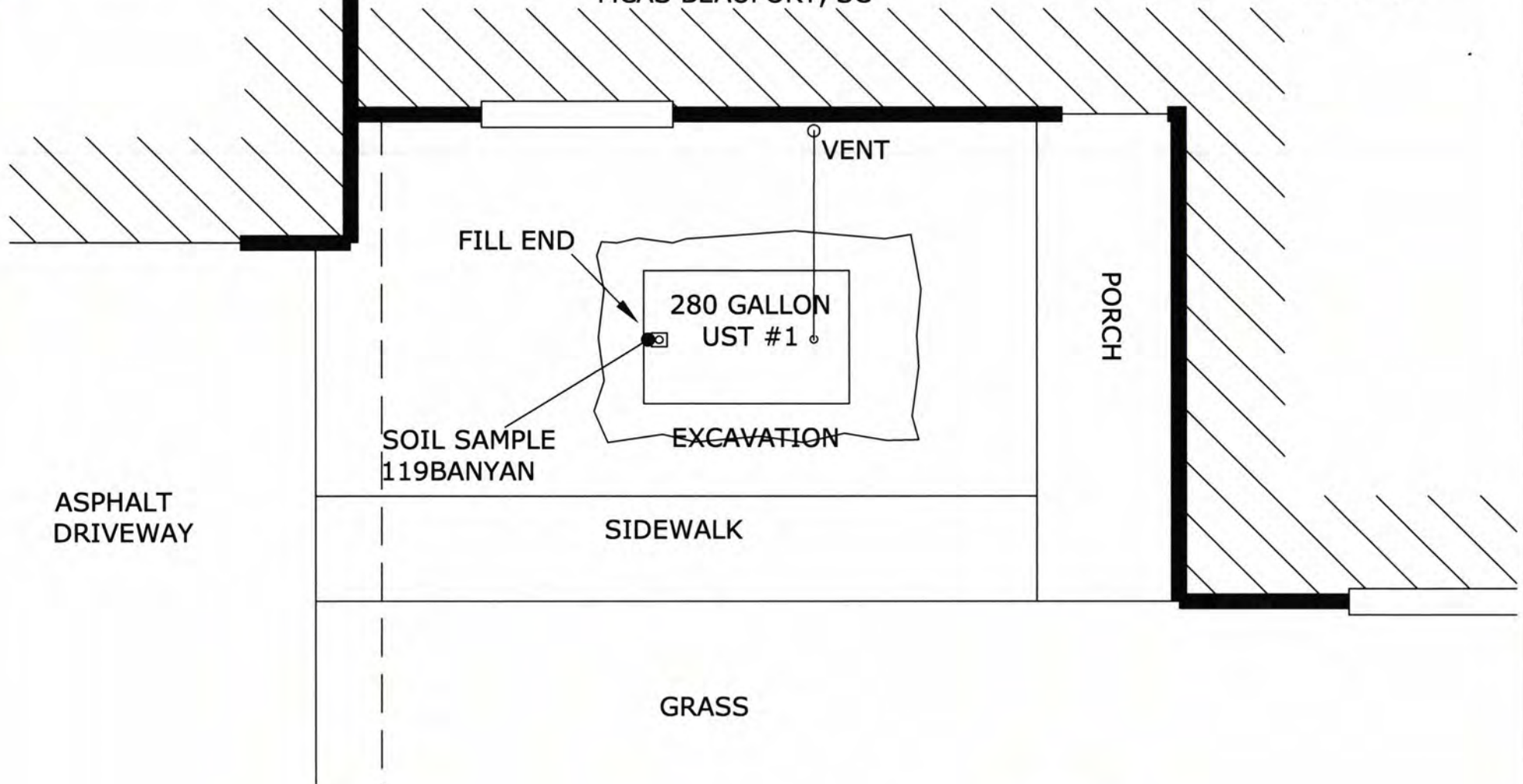
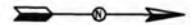
FIGURE 1 SITE MAP
119 BANYAN ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAR 2009

↑ 595' BROAD RIVER

119 BANYAN ST.
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC



ASPHALT
DRIVEWAY

SOIL SAMPLE
119BANYAN

FILL END

280 GALLON
UST #1

VENT

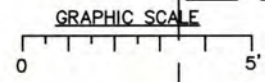
EXCAVATION

PORCH

SIDEWALK

GRASS

UST #1 WAS 32"
BELOW GRADE



<p>SBG 10179 HWY 78 LADSON, SC 29456 ph. (843) 879-0400</p>	<p>FIGURE 2 UST SAMPLE LOCATIONS 119 BANYAN ST., LAUREL BAY MCAS BEAUFORT SC</p>	
	<p>SCALE: GRAPHIC</p>	<p>DWG DATE MAR 2009</p>



Picture 1: 119 Banyan St. site prior to tank removal.



Picture 2: UST 119 Banyon during removal.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC	119 banyan SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	ND							
Toluene	0.00355 mg/kg							
Ethylbenzene	0.168 mg/kg							
Xylenes	0.198 mg/kg							
Naphthalene	4.99 mg/kg							
Benzo (a) anthracene	ND							
Benzo (b) fluoranthene	ND							
Benzo (k) fluoranthene	ND							
Chrysene	ND							
Dibenz (a, h) anthracene	ND							
TPH (EPA 3550)								

CoC	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) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

XV. ANALYTICAL RESULTS

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

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

March 04, 2009 2:28:28PM

Client: EEG - Env. Enterprise Group (2449)
10179 Highway 78
Ladson, SC 29456
Attn: Tom McElwee

Work Order: NSB1765
Project Name: Laurel Bay Housing Project
Project Nbr: [none]
P/O Nbr: 08087
Date Received: 02/20/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
115 Banyan-2	NSB1765-01	02/17/09 09:50
119 Banyan	NSB1765-02	02/17/09 14:25
125 Banyan	NSB1765-03	02/18/09 14:50
129 Banyan-1	NSB1765-04	02/19/09 13:40

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

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

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

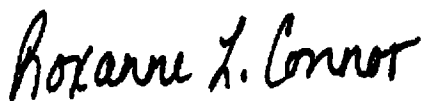
These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Roxanne Connor

Program Manager - Conventional Accounts

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSB1765-01 (115 Banyan-2 - Soil) Sampled: 02/17/09 09:50								
General Chemistry Parameters								
% Dry Solids	79.5		%	0.500	1	03/03/09 07:45	SW-846	9030084
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00232	1	02/23/09 16:29	SW846 8260B	9023273
Ethylbenzene	ND		mg/kg dry	0.00232	1	02/23/09 16:29	SW846 8260B	9023273
Naphthalene	0.0232		mg/kg dry	0.00580	1	02/23/09 16:29	SW846 8260B	9023273
Toluene	ND		mg/kg dry	0.00232	1	02/23/09 16:29	SW846 8260B	9023273
Xylenes, total	ND		mg/kg dry	0.00580	1	02/23/09 16:29	SW846 8260B	9023273
<i>Surr: 1,2-Dichloroethane-d4 (41-150%)</i>	100 %					02/23/09 16:29	SW846 8260B	9023273
<i>Surr: Dibromofluoromethane (55-139%)</i>	101 %					02/23/09 16:29	SW846 8260B	9023273
<i>Surr: Toluene-d8 (57-148%)</i>	100 %					02/23/09 16:29	SW846 8260B	9023273
<i>Surr: 4-Bromofluorobenzene (58-150%)</i>	111 %					02/23/09 16:29	SW846 8260B	9023273
Polyaromatic Hydrocarbons by EPA 8270C								
Acenaphthene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Acenaphthylene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Anthracene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Benzo (a) anthracene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Benzo (a) pyrene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Benzo (b) fluoranthene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Benzo (g,h,i) perylene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Benzo (k) fluoranthene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Chrysene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Dibenz (a,h) anthracene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Fluoranthene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Fluorene	0.678		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Naphthalene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Phenanthrene	1.52		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
Pyrene	ND		mg/kg dry	0.418	5	03/02/09 13:24	SW846 8270C	9022864
<i>Surr: Terphenyl-d14 (26-128%)</i>	73 %					03/02/09 13:24	SW846 8270C	9022864
<i>Surr: 2-Fluorobiphenyl (19-109%)</i>	73 %					03/02/09 13:24	SW846 8270C	9022864
<i>Surr: Nitrobenzene-d5 (22-104%)</i>	72 %					03/02/09 13:24	SW846 8270C	9022864

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSB1765-02 (119 Banyan - Soil) Sampled: 02/17/09 14:25								
General Chemistry Parameters								
% Dry Solids	79.3		%	0.500	1	03/03/09 07:45	SW-846	9030084
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	PX	mg/kg dry	0.00205	1	02/21/09 01:30	SW846 8260B	9022696
Ethylbenzene	0.168		mg/kg dry	0.109	50	02/23/09 18:28	SW846 8260B	9023273
Naphthalene	4.99		mg/kg dry	0.273	50	02/23/09 18:28	SW846 8260B	9023273
Toluene	0.00355	PX	mg/kg dry	0.00205	1	02/21/09 01:30	SW846 8260B	9022696
Xylenes, total	0.198	PX	mg/kg dry	0.00513	1	02/21/09 01:30	SW846 8260B	9022696
<i>Surr: 1,2-Dichloroethane-d4 (41-150%)</i>	106 %					02/21/09 01:30	SW846 8260B	9022696
<i>Surr: 1,2-Dichloroethane-d4 (41-150%)</i>	100 %					02/23/09 18:28	SW846 8260B	9023273
<i>Surr: Dibromofluoromethane (55-139%)</i>	102 %					02/21/09 01:30	SW846 8260B	9022696
<i>Surr: Dibromofluoromethane (55-139%)</i>	101 %					02/23/09 18:28	SW846 8260B	9023273
<i>Surr: Toluene-d8 (57-148%)</i>	393 %					02/21/09 01:30	SW846 8260B	9022696
<i>Surr: Toluene-d8 (57-148%)</i>	98 %					02/23/09 18:28	SW846 8260B	9023273
<i>Surr: 4-Bromofluorobenzene (58-150%)</i>	256 %					02/21/09 01:30	SW846 8260B	9022696
<i>Surr: 4-Bromofluorobenzene (58-150%)</i>	110 %					02/23/09 18:28	SW846 8260B	9023273
Polyaromatic Hydrocarbons by EPA 8270C								
Acenaphthene	2.65		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Acenaphthylene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Anthracene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Benzo (a) anthracene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Benzo (a) pyrene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Benzo (b) fluoranthene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Benzo (g,h,i) perylene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Benzo (k) fluoranthene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Chrysene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Dibenz (a,h) anthracene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Fluoranthene	1.19		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Fluorene	5.92		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Naphthalene	5.58		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Phenanthrene	14.1		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
Pyrene	1.79		mg/kg dry	0.841	10	03/01/09 16:25	SW846 8270C	9022864
<i>Surr: Terphenyl-d14 (26-128%)</i>	64 %					03/01/09 16:25	SW846 8270C	9022864
<i>Surr: 2-Fluorobiphenyl (19-109%)</i>	71 %					03/01/09 16:25	SW846 8270C	9022864
<i>Surr: Nitrobenzene-d5 (22-104%)</i>	66 %					03/01/09 16:25	SW846 8270C	9022864

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSB1765-03 (125 Banyan - Soil) Sampled: 02/18/09 14:50								
General Chemistry Parameters								
% Dry Solids	79.2		%	0.500	1	03/03/09 07:45	SW-846	9030084
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00184	1	02/23/09 16:59	SW846 8260B	9023273
Ethylbenzene	0.00352		mg/kg dry	0.00184	1	02/23/09 16:59	SW846 8260B	9023273
Naphthalene	0.0489		mg/kg dry	0.00459	1	02/23/09 16:59	SW846 8260B	9023273
Toluene	ND		mg/kg dry	0.00184	1	02/23/09 16:59	SW846 8260B	9023273
Xylenes, total	0.00940		mg/kg dry	0.00459	1	02/23/09 16:59	SW846 8260B	9023273
<i>Surr: 1,2-Dichloroethane-d4 (41-150%)</i>	105 %					02/23/09 16:59	SW846 8260B	9023273
<i>Surr: Dibromofluoromethane (55-139%)</i>	108 %					02/23/09 16:59	SW846 8260B	9023273
<i>Surr: Toluene-d8 (57-148%)</i>	123 %					02/23/09 16:59	SW846 8260B	9023273
<i>Surr: 4-Bromofluorobenzene (58-150%)</i>	341 %	ZX				02/23/09 16:59	SW846 8260B	9023273
Polyaromatic Hydrocarbons by EPA 8270C								
Acenaphthene	1.65		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Acenaphthylene	ND		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Anthracene	2.17		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Benzo (a) anthracene	10.0		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Benzo (a) pyrene	5.23		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Benzo (b) fluoranthene	6.02		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Benzo (g,h,i) perylene	1.59		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Benzo (k) fluoranthene	5.27		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Chrysene	10.6		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Dibenz (a,h) anthracene	ND		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Fluoranthene	17.0		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Fluorene	2.47		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Indeno (1,2,3-cd) pyrene	1.88		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Naphthalene	ND		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Phenanthrene	7.97		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
Pyrene	17.4		mg/kg dry	0.829	10	03/01/09 16:47	SW846 8270C	9022864
<i>Surr: Terphenyl-d14 (26-128%)</i>	65 %					03/01/09 16:47	SW846 8270C	9022864
<i>Surr: 2-Fluorobiphenyl (19-109%)</i>	70 %					03/01/09 16:47	SW846 8270C	9022864
<i>Surr: Nitrobenzene-d5 (22-104%)</i>	64 %					03/01/09 16:47	SW846 8270C	9022864

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSB1765-04 (129 Banyan-1 - Soil) Sampled: 02/19/09 13:40								
General Chemistry Parameters								
% Dry Solids	73.1		%	0.500	1	03/03/09 07:45	SW-846	9030084
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00199	1	02/21/09 02:31	SW846 8260B	9022696
Ethylbenzene	ND		mg/kg dry	0.00199	1	02/21/09 02:31	SW846 8260B	9022696
Naphthalene	ND		mg/kg dry	0.00498	1	02/21/09 02:31	SW846 8260B	9022696
Toluene	ND		mg/kg dry	0.00199	1	02/21/09 02:31	SW846 8260B	9022696
Xylenes, total	ND		mg/kg dry	0.00498	1	02/21/09 02:31	SW846 8260B	9022696
<i>Surr: 1,2-Dichloroethane-d4 (41-150%)</i>	93 %					02/21/09 02:31	SW846 8260B	9022696
<i>Surr: Dibromofluoromethane (55-139%)</i>	94 %					02/21/09 02:31	SW846 8260B	9022696
<i>Surr: Toluene-d8 (57-148%)</i>	107 %					02/21/09 02:31	SW846 8260B	9022696
<i>Surr: 4-Bromofluorobenzene (58-150%)</i>	116 %					02/21/09 02:31	SW846 8260B	9022696
Polyaromatic Hydrocarbons by EPA 8270C								
Acenaphthene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Acenaphthylene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Anthracene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Benzo (a) anthracene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Benzo (a) pyrene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Benzo (b) fluoranthene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Benzo (k) fluoranthene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Chrysene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Fluoranthene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Fluorene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Naphthalene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Phenanthrene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
Pyrene	ND		mg/kg dry	0.0895	1	03/01/09 15:18	SW846 8270C	9022864
<i>Surr: Terphenyl-d14 (26-128%)</i>	37 %					03/01/09 15:18	SW846 8270C	9022864
<i>Surr: 2-Fluorobiphenyl (19-109%)</i>	46 %					03/01/09 15:18	SW846 8270C	9022864
<i>Surr: Nitrobenzene-d5 (22-104%)</i>	52 %					03/01/09 15:18	SW846 8270C	9022864

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA 8270C							
SW846 8270C	9022864	NSB1765-01	30.24	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-01RE1	30.24	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-02	30.14	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-02RE1	30.14	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-03	30.60	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-03RE1	30.60	1.00	02/24/09 12:01	TEM	EPA 3550B
SW846 8270C	9022864	NSB1765-04	30.72	1.00	02/24/09 12:01	TEM	EPA 3550B
Selected Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	9022696	NSB1765-01	5.59	5.00	02/20/09 15:59	JRL	EPA 5035
SW846 8260B	9023273	NSB1765-01RE1	5.42	5.00	02/17/09 09:50	JRL	EPA 5035
SW846 8260B	9022696	NSB1765-02	6.15	5.00	02/20/09 16:04	JRL	EPA 5035
SW846 8260B	9023273	NSB1765-02RE1	5.78	5.00	02/17/09 14:25	JRL	EPA 5035
SW846 8260B	9022696	NSB1765-03	5.82	5.00	05/20/09 16:06	JRL	EPA 5035
SW846 8260B	9023273	NSB1765-03RE1	6.88	5.00	02/18/09 14:50	JRL	EPA 5035
SW846 8260B	9022696	NSB1765-04	6.87	5.00	02/20/09 16:07	JRL	EPA 5035

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
---------	-------------	---	-------	------------	------------	--------------------

Selected Volatile Organic Compounds by EPA Method 8260B

9022696-BLK1

Benzene	<0.000670		mg/kg wet	9022696	9022696-BLK1	02/20/09 18:53
Ethylbenzene	<0.000670		mg/kg wet	9022696	9022696-BLK1	02/20/09 18:53
Naphthalene	<0.00151		mg/kg wet	9022696	9022696-BLK1	02/20/09 18:53
Toluene	<0.000670		mg/kg wet	9022696	9022696-BLK1	02/20/09 18:53
Xylenes, total	<0.00172		mg/kg wet	9022696	9022696-BLK1	02/20/09 18:53
Surrogate: 1,2-Dichloroethane-d4	99%			9022696	9022696-BLK1	02/20/09 18:53
Surrogate: Dibromofluoromethane	102%			9022696	9022696-BLK1	02/20/09 18:53
Surrogate: Toluene-d8	99%			9022696	9022696-BLK1	02/20/09 18:53
Surrogate: 4-Bromofluorobenzene	106%			9022696	9022696-BLK1	02/20/09 18:53

9023273-BLK1

Benzene	<0.000670		mg/kg wet	9023273	9023273-BLK1	02/23/09 14:39
Ethylbenzene	<0.000670		mg/kg wet	9023273	9023273-BLK1	02/23/09 14:39
Naphthalene	<0.00151		mg/kg wet	9023273	9023273-BLK1	02/23/09 14:39
Toluene	<0.000670		mg/kg wet	9023273	9023273-BLK1	02/23/09 14:39
Xylenes, total	<0.00172		mg/kg wet	9023273	9023273-BLK1	02/23/09 14:39
Surrogate: 1,2-Dichloroethane-d4	101%			9023273	9023273-BLK1	02/23/09 14:39
Surrogate: Dibromofluoromethane	104%			9023273	9023273-BLK1	02/23/09 14:39
Surrogate: Toluene-d8	97%			9023273	9023273-BLK1	02/23/09 14:39
Surrogate: 4-Bromofluorobenzene	99%			9023273	9023273-BLK1	02/23/09 14:39

Polyaromatic Hydrocarbons by EPA 8270C

9022864-BLK1

Accnaphthene	<0.0310		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Acenaphthylene	<0.0320		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Anthracene	<0.0330		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Benzo (a) anthracene	<0.0380		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Benzo (a) pyrene	<0.0290		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Benzo (b) fluoranthene	<0.0320		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Benzo (g,h,i) perylene	<0.0290		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Benzo (k) fluoranthene	<0.0290		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Chrysene	<0.0390		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Dibenz (a,h) anthracene	<0.0310		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Fluoranthene	<0.0340		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Fluorene	<0.0390		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Indeno (1,2,3-cd) pyrene	<0.0310		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Naphthalene	<0.0410		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Phenanthrene	<0.0340		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
Pyrene	<0.0410		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
1-Methylnaphthalene	<0.0320		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57
2-Methylnaphthalene	<0.0330		mg/kg wet	9022864	9022864-BLK1	02/27/09 16:57

Client EEG - Env. Enterprise Group (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSB1765
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C						
9022864-BLK1						
Surrogate: Terphenyl-d14	52%			9022864	9022864-BLK1	02/27/09 16:57
Surrogate: 2-Fluorobiphenyl	55%			9022864	9022864-BLK1	02/27/09 16:57
Surrogate: Nitrobenzene-d5	56%			9022864	9022864-BLK1	02/27/09 16:57

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
General Chemistry Parameters									
9030084-DUP1									
% Dry Solids	89.6	87.9		%	2	20	9030084	NSB1594-03	03/03/09 07:45

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B								
9022696-BS1								
Benzene	50.0	46.7		ug/kg	93%	76 - 130	9022696	02/20/09 16:51
Ethylbenzene	50.0	45.5		ug/kg	91%	80 - 128	9022696	02/20/09 16:51
Naphthalene	50.0	37.2		ug/kg	74%	63 - 144	9022696	02/20/09 16:51
Toluene	50.0	42.9		ug/kg	86%	80 - 125	9022696	02/20/09 16:51
Xylenes, total	150	132		ug/kg	88%	79 - 130	9022696	02/20/09 16:51
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	49.7			99%	41 - 150	9022696	02/20/09 16:51
<i>Surrogate: Dibromofluoromethane</i>	50.0	52.4			105%	55 - 139	9022696	02/20/09 16:51
<i>Surrogate: Toluene-d8</i>	50.0	50.8			102%	57 - 148	9022696	02/20/09 16:51
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	48.0			96%	58 - 150	9022696	02/20/09 16:51
9023273-BS1								
Benzene	50.0	58.9		ug/kg	118%	76 - 130	9023273	02/23/09 12:39
Ethylbenzene	50.0	54.4		ug/kg	109%	80 - 128	9023273	02/23/09 12:39
Naphthalene	50.0	60.3		ug/kg	121%	63 - 144	9023273	02/23/09 12:39
Toluene	50.0	53.8		ug/kg	108%	80 - 125	9023273	02/23/09 12:39
Xylenes, total	150	163		ug/kg	109%	79 - 130	9023273	02/23/09 12:39
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	49.8			100%	41 - 150	9023273	02/23/09 12:39
<i>Surrogate: Dibromofluoromethane</i>	50.0	52.2			104%	55 - 139	9023273	02/23/09 12:39
<i>Surrogate: Toluene-d8</i>	50.0	49.5			99%	57 - 148	9023273	02/23/09 12:39
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	49.7			99%	58 - 150	9023273	02/23/09 12:39
Polyaromatic Hydrocarbons by EPA 8270C								
9022864-BS1								
Acenaphthene	1.67	1.03		mg/kg wet	62%	52 - 106	9022864	02/27/09 17:26
Acenaphthylene	1.67	1.03		mg/kg wet	62%	53 - 109	9022864	02/27/09 17:26
Anthracene	1.67	1.20		mg/kg wet	72%	54 - 124	9022864	02/27/09 17:26
Benzo (a) anthracene	1.67	1.13		mg/kg wet	68%	53 - 111	9022864	02/27/09 17:26
Benzo (a) pyrene	1.67	1.18		mg/kg wet	71%	52 - 122	9022864	02/27/09 17:26
Benzo (b) fluoranthene	1.67	1.16		mg/kg wet	70%	48 - 115	9022864	02/27/09 17:26
Benzo (g,h,i) perylene	1.67	1.07		mg/kg wet	64%	46 - 114	9022864	02/27/09 17:26
Benzo (k) fluoranthene	1.67	1.13		mg/kg wet	68%	41 - 121	9022864	02/27/09 17:26
Chrysene	1.67	1.12		mg/kg wet	67%	49 - 113	9022864	02/27/09 17:26
Dibenz (a,h) anthracene	1.67	1.13		mg/kg wet	68%	47 - 117	9022864	02/27/09 17:26
Fluoranthene	1.67	1.16		mg/kg wet	70%	52 - 113	9022864	02/27/09 17:26
Fluorene	1.67	1.08		mg/kg wet	65%	54 - 107	9022864	02/27/09 17:26
Indeno (1,2,3-cd) pyrene	1.67	1.12		mg/kg wet	67%	47 - 115	9022864	02/27/09 17:26
Naphthalene	1.67	1.04		mg/kg wet	63%	34 - 107	9022864	02/27/09 17:26
Phenanthrene	1.67	1.09		mg/kg wet	65%	53 - 108	9022864	02/27/09 17:26
Pyrene	1.67	1.11		mg/kg wet	67%	54 - 113	9022864	02/27/09 17:26
1-Methylnaphthalene	1.67	1.02		mg/kg wet	61%	36 - 100	9022864	02/27/09 17:26
2-Methylnaphthalene	1.67	1.05		mg/kg wet	63%	42 - 112	9022864	02/27/09 17:26

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C								
9022864-BS1								
<i>Surrogate: Terphenyl-d14</i>	1.67	0.883			53%	26 - 128	9022864	02/27/09 17:26
<i>Surrogate: 2-Fluorobiphenyl</i>	1.67	0.818			49%	19 - 109	9022864	02/27/09 17:26
<i>Surrogate: Nitrobenzene-d5</i>	1.67	0.796			48%	22 - 104	9022864	02/27/09 17:26

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
9022696-BSD1												
Benzene		50.9		ug/kg	50.0	102%	76 - 130	9	43	9022696		02/20/09 17:21
Ethylbenzene		49.4		ug/kg	50.0	99%	80 - 128	8	48	9022696		02/20/09 17:21
Naphthalene		40.8		ug/kg	50.0	82%	63 - 144	9	50	9022696		02/20/09 17:21
Toluene		46.5		ug/kg	50.0	93%	80 - 125	8	44	9022696		02/20/09 17:21
Xylenes, total		144		ug/kg	150	96%	79 - 130	9	48	9022696		02/20/09 17:21
Surrogate: 1,2-Dichloroethane-d4		49.7		ug/kg	50.0	99%	41 - 150			9022696		02/20/09 17:21
Surrogate: Dibromofluoromethane		51.8		ug/kg	50.0	104%	55 - 139			9022696		02/20/09 17:21
Surrogate: Toluene-d8		50.9		ug/kg	50.0	102%	57 - 148			9022696		02/20/09 17:21
Surrogate: 4-Bromofluorobenzene		47.5		ug/kg	50.0	95%	58 - 150			9022696		02/20/09 17:21
9023273-BSD1												
Benzene		59.7		ug/kg	50.0	119%	76 - 130	1	43	9023273		02/23/09 13:09
Ethylbenzene		55.1		ug/kg	50.0	110%	80 - 128	1	48	9023273		02/23/09 13:09
Naphthalene		59.8		ug/kg	50.0	120%	63 - 144	0.9	50	9023273		02/23/09 13:09
Toluene		54.4		ug/kg	50.0	109%	80 - 125	1	44	9023273		02/23/09 13:09
Xylenes, total		165		ug/kg	150	110%	79 - 130	0.9	48	9023273		02/23/09 13:09
Surrogate: 1,2-Dichloroethane-d4		51.8		ug/kg	50.0	104%	41 - 150			9023273		02/23/09 13:09
Surrogate: Dibromofluoromethane		53.4		ug/kg	50.0	107%	55 - 139			9023273		02/23/09 13:09
Surrogate: Toluene-d8		50.2		ug/kg	50.0	100%	57 - 148			9023273		02/23/09 13:09
Surrogate: 4-Bromofluorobenzene		49.6		ug/kg	50.0	99%	58 - 150			9023273		02/23/09 13:09

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B										
9022696-MS1										
Benzene	44.8	63.6		ug/kg	50.0	38%	33 - 146	9022696	NSB1670-06	02/21/09 03:01
Ethylbenzene	5.21	34.4		ug/kg	50.0	58%	16 - 160	9022696	NSB1670-06	02/21/09 03:01
Naphthalene	10.2	19.0		ug/kg	50.0	17%	10 - 151	9022696	NSB1670-06	02/21/09 03:01
Toluene	5.72	30.2		ug/kg	50.0	49%	30 - 145	9022696	NSB1670-06	02/21/09 03:01
Xylenes, total	7.99	86.6		ug/kg	150	52%	16 - 159	9022696	NSB1670-06	02/21/09 03:01
Surrogate: 1,2-Dichloroethane-d4		50.2		ug/kg	50.0	100%	41 - 150	9022696	NSB1670-06	02/21/09 03:01
Surrogate: Dibromofluoromethane		50.0		ug/kg	50.0	100%	55 - 139	9022696	NSB1670-06	02/21/09 03:01
Surrogate: Toluene-d8		51.8		ug/kg	50.0	104%	57 - 148	9022696	NSB1670-06	02/21/09 03:01
Surrogate: 4-Bromofluorobenzene		56.2		ug/kg	50.0	112%	58 - 150	9022696	NSB1670-06	02/21/09 03:01
9023273-MS1										
Benzene	ND	1.84		mg/kg wet	1.66	111%	33 - 146	9023273	NSB1787-02RE 1	02/23/09 22:27
Ethylbenzene	ND	1.71		mg/kg wet	1.66	104%	16 - 160	9023273	NSB1787-02RE 1	02/23/09 22:27
Naphthalene	ND	1.69		mg/kg wet	1.66	102%	10 - 151	9023273	NSB1787-02RE 1	02/23/09 22:27
Toluene	ND	1.68		mg/kg wet	1.66	101%	30 - 145	9023273	NSB1787-02RE 1	02/23/09 22:27
Xylenes, total	ND	5.14		mg/kg wet	4.97	104%	16 - 159	9023273	NSB1787-02RE 1	02/23/09 22:27
Surrogate: 1,2-Dichloroethane-d4		47.8		ug/kg	50.0	96%	41 - 150	9023273	NSB1787-02RE 1	02/23/09 22:27
Surrogate: Dibromofluoromethane		50.7		ug/kg	50.0	101%	55 - 139	9023273	NSB1787-02RE 1	02/23/09 22:27
Surrogate: Toluene-d8		48.9		ug/kg	50.0	98%	57 - 148	9023273	NSB1787-02RE 1	02/23/09 22:27
Surrogate: 4-Bromofluorobenzene		50.1		ug/kg	50.0	100%	58 - 150	9023273	NSB1787-02RE 1	02/23/09 22:27

Client EEG - Env. Enterprise Group (2449)
 10179 Highway 78
 Ladson, SC 29456
 Attn Tom McElwee

Work Order: NSB1765
 Project Name: Laurel Bay Housing Project
 Project Number: [none]
 Received: 02/20/09 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
9022696-MSD1												
Benzene	44.8	76.1		ug/kg	50.0	63%	33 - 146	18	43	9022696	NSB1670-06	02/21/09 03:32
Ethylbenzene	5.21	40.0		ug/kg	50.0	70%	16 - 160	15	48	9022696	NSB1670-06	02/21/09 03:32
Naphthalene	10.2	23.6		ug/kg	50.0	27%	10 - 151	22	50	9022696	NSB1670-06	02/21/09 03:32
Toluene	5.72	35.8		ug/kg	50.0	60%	30 - 145	17	44	9022696	NSB1670-06	02/21/09 03:32
Xylenes, total	7.99	104		ug/kg	150	64%	16 - 159	18	48	9022696	NSB1670-06	02/21/09 03:32
Surrogate: 1,2-Dichloroethane-d4		50.9		ug/kg	50.0	102%	41 - 150			9022696	NSB1670-06	02/21/09 03:32
Surrogate: Dibromofluoromethane		50.6		ug/kg	50.0	101%	55 - 139			9022696	NSB1670-06	02/21/09 03:32
Surrogate: Toluene-d8		51.6		ug/kg	50.0	103%	57 - 148			9022696	NSB1670-06	02/21/09 03:32
Surrogate: 4-Bromofluorobenzene		53.9		ug/kg	50.0	108%	58 - 150			9022696	NSB1670-06	02/21/09 03:32
9023273-MSD1												
Benzene	ND	1.95		mg/kg wet	1.66	118%	33 - 146	6	43	9023273	NSB1787-02RE	02/23/09 22:57
Ethylbenzene	ND	1.84		mg/kg wet	1.66	111%	16 - 160	7	48	9023273	NSB1787-02RE	02/23/09 22:57
Naphthalene	ND	1.90		mg/kg wet	1.66	115%	10 - 151	11	50	9023273	NSB1787-02RE	02/23/09 22:57
Toluene	ND	1.77		mg/kg wet	1.66	107%	30 - 145	5	44	9023273	NSB1787-02RE	02/23/09 22:57
Xylenes, total	ND	5.53		mg/kg wet	4.97	111%	16 - 159	7	48	9023273	NSB1787-02RE	02/23/09 22:57
Surrogate: 1,2-Dichloroethane-d4		49.0		ug/kg	50.0	98%	41 - 150			9023273	NSB1787-02RE	02/23/09 22:57
Surrogate: Dibromofluoromethane		50.1		ug/kg	50.0	100%	55 - 139			9023273	NSB1787-02RE	02/23/09 22:57
Surrogate: Toluene-d8		49.1		ug/kg	50.0	98%	57 - 148			9023273	NSB1787-02RE	02/23/09 22:57
Surrogate: 4-Bromofluorobenzene		49.8		ug/kg	50.0	100%	58 - 150			9023273	NSB1787-02RE	02/23/09 22:57

Client EEG - Env. Enterprise Group (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSB1765
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 02/20/09 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	South Carolina
SW846 8260B	Soil	N/A	X	X
SW846 8270C	Soil	N/A	X	X
SW-846	Soil			

Client EEG - Env. Enterprise Group (2449)
10179 Highway 78
Ladson, SC 29456
Attn Tom McElwee

Work Order: NSB1765
Project Name: Laurel Bay Housing Project
Project Number: [none]
Received: 02/20/09 08:00

DATA QUALIFIERS AND DEFINITIONS

PX Sample for VOA analysis not received in preserved VOA vials or Encore or similar sampling device.
ZX Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

ATTACHMENT A

Appendix C
Laboratory Analytical Report - Initial Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: OG18009-010
Description: BEALB119TW01WG20130718	Matrix: Aqueous
Date Sampled: 07/18/2013 1130	
Date Received: 07/19/2013	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/26/2013 1706	JAC		25956

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	ND		0.50	0.25	0.027	ug/L	1
Ethylbenzene	100-41-4	8260B	7.5		0.50	0.25	0.17	ug/L	1
Naphthalene	91-20-3	8260B	58		0.50	0.25	0.12	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	0.25	0.17	ug/L	1
Xylenes (total)	1330-20-7	8260B	8.5		0.50	0.25	0.17	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-120
Toluene-d8		103	85-120
Bromofluorobenzene		102	75-120
Dibromofluoromethane		97	85-115

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

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

Level 1 Report v2.1

Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: OG18009-010
Description: BEALB119TW01WG20130718	Matrix: Aqueous
Date Sampled: 07/18/2013 1130	
Date Received: 07/19/2013	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/22/2013 1527	JRG	07/19/2013 1544	25460

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	0.11	J	0.21	0.10	0.085	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		0.21	0.10	0.090	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.21	0.10	0.095	ug/L	1
Chrysene	218-01-9	8270D	ND		0.21	0.10	0.056	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.21	0.10	0.060	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	50-110
Nitrobenzene-d5		52	40-110
Terphenyl-d14		72	50-135

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

Appendix D
Laboratory Analytical Reports – Permanent Well Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QL11039-004
Description: BEALB119MW01WG20151211	Matrix: Aqueous
Date Sampled: 12/11/2015 1245	
Date Received: 12/11/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2015 1355	JM1		92708

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	5.0		5.0	0.51	0.21	ug/L	1
Naphthalene	91-20-3	8260B	36		5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	3.3	J	5.0	0.57	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	75-120
1,2-Dichloroethane-d4		105	70-120
Toluene-d8		106	85-120
Dibromofluoromethane		109	85-115

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**

Laboratory ID: **QL11039-004**

Description: **BEALB119MW01WG20151211**

Matrix: **Aqueous**

Date Sampled: **12/11/2015 1245**

Date Received: **12/11/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/21/2015 1926	RBH	12/18/2015 0905	92499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.065	J	0.20	0.040	0.019	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.034	J	0.20	0.040	0.019	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L	1
Chrysene	218-01-9	8270D (SIM)	0.079	J	0.20	0.040	0.021	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		69	15-139
Fluoranthene-d10		92	23-154

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

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

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QL11039-003
Description: BEALB119MW02WG20151211	Matrix: Aqueous
Date Sampled: 12/11/2015 1015	
Date Received: 12/11/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2015 1333	JM1		92708

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L	1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L	1
Naphthalene	91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L	1
Toluene	108-88-3	8260B	0.31	J	5.0	0.48	0.24	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	75-120
1,2-Dichloroethane-d4		104	70-120
Toluene-d8		105	85-120
Dibromofluoromethane		105	85-115

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants	Laboratory ID: QL11039-003
Description: BEALB119MW02WG20151211	Matrix: Aqueous
Date Sampled: 12/11/2015 1015	
Date Received: 12/11/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/21/2015 1859	RBH	12/18/2015 0905	92499

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		63	15-139
Fluoranthene-d10		93	23-154

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

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QL11039-001
Description: BEALB119MW03WG20151211	Matrix: Aqueous
Date Sampled: 12/11/2015 0915	
Date Received: 12/11/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/21/2015 1310	JM1		92708

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	75-120
1,2-Dichloroethane-d4		103	70-120
Toluene-d8		105	85-120
Dibromofluoromethane		106	85-115

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**

Laboratory ID: **QL11039-001**

Description: **BEALB119MW03WG20151211**

Matrix: **Aqueous**

Date Sampled: **12/11/2015 0915**

Date Received: **12/11/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/21/2015 1832	RBH	12/18/2015 0905	92499

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		58	15-139
Fluoranthene-d10		101	23-154

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

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

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: QL16007-001
Description: BEALB119MW04WG20151214	Matrix: Aqueous
Date Sampled: 12/14/2015 1220	
Date Received: 12/16/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2015 2004	ECP		92976

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	75-120
1,2-Dichloroethane-d4		109	70-120
Toluene-d8		109	85-120
Dibromofluoromethane		113	85-115

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants	Laboratory ID: QL16007-001
Description: BEALB119MW04WG20151214	Matrix: Aqueous
Date Sampled: 12/14/2015 1220	
Date Received: 12/16/2015	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	12/22/2015 1011	RBH	12/20/2015 1910	92636

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		88	15-139
Fluoranthene-d10		97	23-154

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

Appendix E
Historical Groundwater Analytical Results

Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLS			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene			
						5	700	25	1000	10000	10	10	10	10	10			
			Well ID	Sample Date	Sample Type													
119 Banyan Drive	57 Banyan Drive	LTM	BEALB119MW01	12/11/2015	N	< 0.45 U	5.0	36 J	< 0.48 U	3.3 J	0.065 J	0.034 J	< 0.040 U	0.079 J	< 0.080 U			
					7/28/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	
					6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.050 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
					1/23/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				12/11/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	0.31 J	< 0.57 U	< 0.40 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				7/28/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	
				1/23/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
				12/11/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.40 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				7/28/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	
				6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	
				1/23/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
128 Banyan Drive	156 Banyan Drive	LTM	BEALB128MW01	12/14/2015	N	0.68 J	6.5	29	0.42 J	21	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
					7/28/2016	N	1.7	18	51	0.87 J	19	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
					6/14/2017	N	1.4	19	55	0.79 J	33	0.048 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
					1/22/2018	N	NA	NA	64	NA	NA	NA	NA	NA	NA	NA	NA	
				12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				7/28/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.043 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
				1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
				12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				7/29/2016	N	1.4	7.1	39	< 0.80 U	15	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
				6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	
				1/22/2018	N	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	7.4	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
	7/29/2016	FD	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
	6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.043 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ				
	1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA				
130 Banyan Drive	174 Banyan Drive	LTM	BEALB130MW01	3/23/2017	N	1.2	66	160	< 0.80	12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			
				1/19/2018	N	0.45 J	35	96	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U			
132 Banyan Drive	188 Banyan Drive	LTM	BEALB132MW01	12/15/2015	N	7.9	42	150 J	< 0.48 U	39	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
					7/29/2016	N	30	78	200	< 0.80 U	60	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
					6/15/2017	N	17	52	150	< 0.80 U	33	0.050 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
					1/19/2018	N	33	NA	310	NA	NA	NA	NA	NA	NA	NA	NA	
				12/15/2015	N	0.50 J	< 0.51 U	2.8 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				7/29/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.041 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				1/19/2018	N	< 0.80 U	NA	0.99 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	
				12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				7/29/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ		
				1/19/2018	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
	7/29/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
	6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.13 J	< 0.10 U	< 0.10 U	< 0.10 U	0.080 J	< 0.10 UJ					
	1/19/2018	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA				
135 Birch Drive	378 Birch Drive	LTM	BEALB135MW01	12/15/2015	N	< 0.45 U	3.4 J	79	< 0.48 U	0.36 J	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
					8/2/2016	FD	< 0.80 U	2.4	45	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
					6/14/2017	N	< 0.80 U	2.6	47	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
					1/23/2018	N	NA	NA	64	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	
				12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				8/1/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
				1/23/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
				12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.096 J	< 0.10 U	< 0.10 U	< 0.10 U	0.042 J	< 0.10 UJ		
				1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/14/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
	8/1/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
	6/13/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.044 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ					
	1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA				



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLSs			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	
						5	700	25	1000	10000	10	10	10	10	10	
			Well ID	Sample Date	Sample Type											
148 Laurel Bay Boulevard	917 Laurel Bay Boulevard	LTM	BEALB148MW01*	12/16/2015	N	< 0.45 U	13	110 J	< 0.48 U	8.9	0.045 J	< 0.040 U	< 0.040 U	0.043 J	< 0.080 U	
				8/2/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP
				6/15/2017	N	< 0.80 U	4.0	28	< 0.80 U	< 0.80 U	< 0.80 U	0.16 J	0.042 J	< 0.10 UJ	0.10 J	< 0.10 UJ
				1/22/2018	N*	< 0.80 U	8.1	87	< 0.80 U	< 0.80 U	< 0.80 U	0.24	0.098 J	< 0.10 U	0.15 J	< 0.10 U
			BEALB148MW02	12/16/2015	N	< 0.45 U	0.60 J	48 J	0.24 J	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	18	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/15/2017	N	< 0.80 U	< 0.80 U	16	< 0.80 U	< 0.80 U	0.047 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				1/19/2018	N	< 0.80 U	< 0.80 U	14	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
			BEALB148MW03	12/16/2015	N	< 0.45 U	0.56 J	6.6 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	0.93 J	16	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/15/2017	N	< 0.80 U	0.84 J	5.4	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				1/19/2018	N	< 0.80 U	0.43 J	2.7	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
			BEALB148MW04	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/15/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				1/19/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
156 Laurel Bay Boulevard	989 Laurel Bay Boulevard	LTM	BEALB156MW01	12/15/2015	N	< 0.45 U	9.2	72	< 0.48 U	25	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U		
				8/1/2016	N	< 0.80 U	13	110	< 0.80 U	18	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/14/2017	N	< 0.80 U	8.6	62	< 0.80 U	6.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/23/2018	N	NA	NA	110	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB156MW02	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/1/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
				1/23/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB156MW03	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/1/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
				1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB156MW04	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/1/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
				1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB156MW05	12/15/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/3/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/14/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
				1/22/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA
256 Beech Street	53 Beech Street	LTM	BEALB256MW01	3/23/2017	N	1.2	14	38	< 0.80	12	< 0.10	< 0.10	< 0.10	< 0.10		
				7/25/2016	FD	1.3	15	38	< 0.80	13	< 0.10	< 0.10	< 0.10	< 0.10		
				1/23/2018	N	2.3	14	50	< 0.80 U	2.2	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
273 Birch Drive	82 Birch Drive	LTM	BEALB273MW01	7/25/2016	N	2.4	5.9	75	< 0.80 U	1.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				6/14/2017	N	1.9	16	170	< 0.80 U	< 0.80 U	0.056 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
				1/23/2018	N	2.6	11	140	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
282 Birch Drive	191 Birch Drive	NFA	BEALB282MW136	7/30/2013	N	0.41 J	1.2	57	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U			
				9/11/2014	N	< 0.40 U	0.76 J	14	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				9/15/2015	FD	< 0.40 U	0.76 J	15	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				7/28/2016	N	< 0.45 U	NA	16	NA	NA	NA	NA	NA	NA		
				7/28/2016	FD	< 0.45 U	NA	13	NA	NA	NA	NA	NA	NA		
				7/28/2016	N	NA	NA	15	NA	NA	NA	NA	NA	NA		
			BEALB282MW137	7/30/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA		
				7/28/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA		
				7/30/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
BEALB282MW138	9/15/2015	N	< 0.45 U	NA	0.14 J	NA	NA	NA	NA	NA	NA	NA				
	7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA				
	7/30/2013	N	< 0.25 U	< 0.25 U	0.41 J	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
	9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
BEALB282MW139	9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA				
	7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA				
	7/30/2013	N	< 0.25 U	< 0.25 U	0.41 J	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
	9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
285 Birch Drive	174 Birch Drive	LTM	BEALB285MW01	3/23/2017	N	0.95	5.1	33	< 0.80	5.9	< 0.10	< 0.10	< 0.10	< 0.10		
				1/23/2018	N	2.1	10	60	< 0.80 U	7.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
292 Birch Drive	273 Birch Drive	NFA	BEALB292MW01	3/23/2017	N	< 0.80	3.2	10	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10			
325 Ash Street	238 Ash Street	LTM	BEALB325MW01	7/25/2016	N	< 0.80 U	25	100 J	< 0.80 U	18	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ		
				6/14/2017	N	< 0.80 U	18	86	< 0.80 U	8.8	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ		
				1/23/2018	N	< 0.80 U	16	92	< 0.80 U	7.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLS			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene
						5	700	25	1000	10000	10	10	10	10	10
			Well ID	Sample Date	Sample Type										
326 Ash Street	239 Ash Street	LTM	BEALB326MW01	7/25/2016	N	2.6	15	49	0.86 J	59	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/14/2017	N	2.2	8.0	37	< 0.80 U	23	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ
				1/23/2018	N	3.7	19	74	0.68 J	43	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
330 Ash Street	309 Ash Street	LTM	BEALB330MW01	7/26/2016	N	1.3	48	120	0.86 J	100	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
				6/14/2017	N	1.5	46	150	1.1	68	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				1/24/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP
331 Ash Street	324 Ash Street	LTM	BEALB331MW01	3/23/2017	N	< 0.80	2.0	41	< 0.80	3.6	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
				1/24/2018	N	< 0.80 U	1.0	32	< 0.80 U	1.8	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
335 Ash Street	350 Ash Street	LTM	BEALB335MW01	1/24/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP
336 Ash Street	381 Ash Street	LTM	BEALB336MW01	7/25/2016	N	5.9	12	55	< 0.80 U	2.0	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
					FD	6.6	13	63	< 0.80 U	2.3	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/15/2017	N	7.7	21	130	< 0.80 U	< 0.80 U	0.041 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
342 Ash Street	445 Ash Street	NFA	BEALB342MW01	1/24/2018	N	6.6	18	79	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				3/23/2017	N	0.68	0.72	5.1	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
				7/25/2016	N	< 0.80 U	13	37	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
343 Ash Street	410 Ash Street	LTM	BEALB343MW01	6/15/2017	N	< 0.80 U	3.9	7.7	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				1/24/2018	N	< 0.80 U	1.7	8.7	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				7/25/2016	N	0.97 J	15	100	< 0.80 U	1.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
353 Ash Street	502 Ash Street	LTM	BEALB353MW01	6/15/2017	N	1.4	11	17	< 0.80 U	0.47 J	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	
				1/26/2018	N	1.2	18	1.6	< 0.80 U	0.56 J	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	
				7/29/2013	N	0.25 J	15	72	< 0.25 U	23	0.33	0.19 J	< 0.11 U	0.20 J	< 0.11 U
388 Acorn Drive	125 Acorn Drive	LTM	BEALB388MW110	9/10/2014	N	2.0	14	71	< 0.20 U	18	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/14/2015	N	0.75 J	NA	49 BJ	NA	NA	NA	NA	NA	NA	
				7/27/2016	N	NA	NA	30	NA	NA	NA	NA	NA	NA	
				6/15/2017	N	NA	NA	34	NA	NA	NA	NA	NA	NA	
				1/24/2018	N	NA	NA	62	NA	NA	NA	NA	NA	NA	
				7/29/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
			BEALB388MW111	9/10/2014	N	< 0.40 U	< 0.20 U	0.48 J	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/14/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	
				6/15/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	
				1/24/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	
				7/29/2013	N	< 0.25 U	< 0.25 U	14	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
			BEALB388MW112	9/10/2014	N	< 0.40 U	< 0.20 U	26	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/14/2015	N	< 0.45 U	NA	6.8 BJ	NA	NA	NA	NA	NA	NA	
				7/27/2016	N	NA	NA	2.8	NA	NA	NA	NA	NA	NA	
	FD	NA		NA	3.2	NA	NA	NA	NA	NA	NA				
6/15/2017	N	NA		NA	8.5	NA	NA	NA	NA	NA	NA				
1/24/2018	N	NA		NA	3.5	NA	NA	NA	NA	NA	NA				
391 Acorn Drive	138 Acorn Drive	NFA	BEALB391MW113	7/30/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
				9/10/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	
			BEALB391MW114	7/29/2013	N	< 0.25 U	< 0.25 U	6.6	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
					FD	< 0.25 U	< 0.25 U	6.3	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
				9/10/2014	N	< 0.40 U	< 0.20 U	12	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
			BEALB391MW115	9/14/2015	N	< 0.45 U	NA	0.51 BJ	NA	NA	NA	NA	NA	NA	
				7/29/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	
				9/10/2014	N	< 0.40 U	< 0.20 U	0.89 J	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
			BEALB391MW116	9/14/2015	N	< 0.45 U	NA	0.63 BJ	NA	NA	NA	NA	NA	NA	
				7/29/2013	N	< 0.25 U	< 0.25 U	3.7	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				9/10/2014	N	< 0.40 U	< 0.20 U	0.57 J	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
398 Acorn Drive	203 Acorn Drive	NFA	BEALB398MW104	9/14/2015	N	< 0.45 U	NA	19 BJ	NA	NA	NA	NA	NA		
				7/30/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				9/10/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U		
			BEALB398MW105	9/15/2015	N	< 0.45 U	NA	0.18 J	NA	NA	NA	NA	NA	NA	
				7/30/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U		
				9/10/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U		
			BEALB398MW106	9/15/2015	N	< 0.45 U	NA	0.93	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
				7/30/2013	N	0.71	0.18 J	0.93	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
				9/10/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U		
430 Elderberry Drive	323 Elderberry Drive	NFA	BEALB430MW01	9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA		
				7/22/2016	N	< 0.80 U	9.1	24	< 0.80 U	24	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLS			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene				
						5	700	25	1000	10000	10	10	10	10	10				
			Well ID	Sample Date	Sample Type														
437 Elderberry Drive	362 Elderberry Drive	LTM	BEALB437MW133	7/31/2013	N	0.93	25	110	0.57	49	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ				
					FD	0.96	26	110	0.61	50	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ				
				9/11/2014	N	0.40 J	8.8	41	< 0.20 U	18	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
					FD	0.41 J	9.3	45	< 0.20 U	19	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
				9/15/2015	N	1.5 J	NA	180 BJ	NA	NA	NA	NA	NA	NA	NA	NA			
					FD	1.3 J	NA	200 BJ	NA	NA	NA	NA	NA	NA	NA	NA			
			7/27/2016	N	NA	NA	77	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			6/15/2017	N	NA	NA	170	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			1/25/2018	N	NA	NA	83	NA	NA	NA	NA	NA	NA	NA	NA	NA			
			BEALB437MW134	7/31/2013	N	< 0.50 U	< 0.50 U	6.9	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	1.1	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
				9/15/2015	N	< 0.45 U	NA	0.86 J	NA	NA	NA	NA	NA	NA	NA	NA			
				7/27/2016	N	NA	NA	0.88 J	NA	NA	NA	NA	NA	NA	NA	NA			
				6/15/2017	N	NA	NA	1.7	NA	NA	NA	NA	NA	NA	NA	NA			
				1/25/2018	N	NA	NA	1.0	NA	NA	NA	NA	NA	NA	NA	NA			
			BEALB437MW135	7/31/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA			
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				6/15/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				1/24/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
			BEALB437MW140	7/31/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA			
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				6/15/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				1/24/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
			BEALB437MW141	7/31/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA			
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				6/15/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
				1/24/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA			
			BEALB437MW142	7/31/2013	N	< 0.50 U	< 0.50 U	0.33 J	< 0.50 U	0.18 J	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U			
				9/15/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA			
				7/27/2016	N	NA	NA	2.4	NA	NA	NA	NA	NA	NA	NA	NA			
				6/15/2017	N	NA	NA	1.1	NA	NA	NA	NA	NA	NA	NA	NA			
				1/24/2018	N	NA	NA	0.67 J	NA	NA	NA	NA	NA	NA	NA	NA			
			440 Elderberry Drive	405 Elderberry Drive	LTM	BEALB440MW01	7/22/2016	N	1.1	16	88	< 0.80 U	11	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	
								FD	1.0	15	90	< 0.80 U	9.7	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
							6/15/2017	N	0.56 J	8.5	64	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
							1/24/2018	N	< 0.80 U	3.4	31	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	
			441 Elderberry Drive	392 Elderberry Drive	NFA	BEALB441MW117	7/31/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	
								FD	< 0.40 U	< 0.20 U	0.54 J	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
						BEALB441MW118	7/31/2013	N	< 0.50 U	< 0.50 U	6.9	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
							9/11/2014	N	< 0.40 U	< 0.20 U	2.7	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
						BEALB441MW119	7/31/2013	N	< 0.50 U	0.22 J	7.0	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
9/11/2014	N	< 0.40 U					0.33 J	8.1	< 0.40 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U				
456 Elderberry Drive	537 Elderberry Drive	LTM	BEALB456MW01	7/22/2016	N	6.1	44	200	< 4.0 U	28	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
				6/15/2017	N	5.4	64	340	< 0.80 U	41	0.21 J	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U				
				1/26/2018	N	4.4 J	51	320	< 4.0 U	36	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
458 Elderberry Drive	551 Elderberry Drive	LTM	BEALB458MW01	7/22/2016	N	1.5	19	76	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
				6/15/2017	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP				
				1/24/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP				
468 Dogwood Drive	65 Dogwood Drive	NFA	BEALB468MW01	7/25/2016	N	< 0.80 U	< 0.80 U	1.3	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
473 Dogwood Drive	82 Dogwood Drive	LTM	BEALB473MW01	3/23/2017	N	< 0.80 U	11	57	< 0.80 U	2.7	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
				1/24/2018	N	< 0.80 U	5.3	37	< 0.80 U	0.60 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
518 Laurel Bay Boulevard	403 Laurel Bay Boulevard	NFA	BEALB518MW01	7/26/2016	N	< 0.80 U	1.5	20	< 0.80 U	2.6	< 0.10 U	0.16 J	0.15 J	< 0.10 U					
635 Dahlia Drive	542 Dahlia Drive	NFA	BEALB635MW01	7/22/2016	N	< 0.80 U	< 0.80 U	0.81 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
638 Dahlia Drive	549 Dahlia Drive	NFA	BEALB638MW01	7/22/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
640 Dahlia Drive	569 Dahlia Drive	NFA	BEALB640MW01	7/22/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
				BEALB640MW02	7/22/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
647 Dahlia Drive	668 Dahlia Drive	NFA	BEALB647MW01	7/21/2016	N	< 0.80 U	0.59 J	4.3	< 0.80 U	0.79 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
648 Dahlia Drive	633 Dahlia Drive	LTM	BEALB648MW01	7/21/2016	N	< 0.80 U	1.2	4.8	< 0.80 U	1.9	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
				6/16/2017	N	< 0.80 U	5.3	7.7	< 0.80 U	0.98 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U					
				1/24/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP				



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLS			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene		
			Well ID	Sample Date	Sample Type	5	700	25	1000	10000	10	10	10	10	10		
650 Dahlia Drive	653 Dahlia Drive	LTM	BEALB650MW01	7/21/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
				6/16/2017	N	0.56 J	13	59	< 0.80 U	2.3	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/26/2018	N	< 0.80 U	4.3	12	< 0.80 U	0.46 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
			BEALB650MW02	7/21/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				6/15/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	
				1/26/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
652 Dahlia Drive	669 Dahlia Drive	NFA	BEALB652MW01	7/21/2016	N	< 0.80 U	< 0.80 U	0.61 J	< 0.80 U	0.49 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U			
			BEALB652MW02	7/21/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
747 Blue Bell Lane	426 Blue Bell Lane	NFA	BEALB747MW01	3/23/2017	N	< 0.80	2.1	22	< 0.80	0.70	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
749 Blue Bell Lane	440 Blue Bell Lane	LTM	BEALB749MW01	3/23/2017	N	< 0.80	3.3	29	< 0.80	7.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
				1/25/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
760 Althea Street	101 Althea Street	NFA	BEALB760MW01	7/21/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U			
775 Althea Street	244 Althea Street	NFA	BEALB775MW01	3/23/2017	N	< 0.80	6.2	23	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
1033 Foxglove Street	256 Foxglove Street	NFA	BEALB1033MW01	12/16/2015	N	< 0.45 U	< 0.51 U	1.1 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				FD	< 0.45 U	< 0.51 U	0.84 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
			BEALB1033MW02	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
			BEALB1033MW03	12/16/2015	N	< 0.45 U	< 0.51 U	0.30 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
1034 Foxglove Street	261 Foxglove Street	NFA	BEALB1034MW04	12/15/2015	N	< 0.45 U	< 0.51 U	0.71 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				BEALB1034MW01	3/24/2017	N	< 0.80	< 0.80	< 0.80	1.5	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
1054 Gardenia Drive	Empty Lot	LTM	BEALB1054DMW1	8/1/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U		
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/16/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/27/2016	N	NA	NA	0.99 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1054MW127	8/1/2013	N	< 0.50 U	2.5	25	< 0.50 U	0.62	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ
				9/11/2014	N	< 0.40 U	2.3	15	< 0.20 U	1.1	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				9/16/2015	N	< 0.45 U	NA	17	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/28/2016	N	NA	NA	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	7.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/25/2018	N	NA	NA	8.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1054MW128	8/1/2013	N	< 0.50 U	4.4	42	0.20 J	6.3	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ	< 0.21 UJ
				9/11/2014	N	< 0.40 U	2.4	18	< 0.20 U	2.5	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				9/16/2015	N	< 0.45 U	NA	23 BJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/27/2016	N	NA	NA	4.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/25/2018	N	NA	NA	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1054MW129	8/1/2013	N	0.32 J	18	73	2.1	35	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
				9/11/2014	N	0.19 J	13	54	1.3	25	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				FD	0.19 J	12	44	1.3	22	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				9/16/2015	N	< 0.45 U	NA	54 BJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
				FD	< 0.45 U	NA	59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/28/2016	N	NA	NA	29	NA	NA	NA	NA	NA	NA	NA	NA	NA
			6/19/2017	N	NA	NA	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			1/25/2018	N	NA	NA	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			BEALB1054MW2	8/1/2013	N	< 0.50 U	< 0.50 U	3.7	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
				FD	< 0.50 U	< 0.50 U	3.7	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	
				9/11/2014	N	< 0.40 U	< 0.20 U	0.45 J	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				9/16/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			BEALB1054MW4	8/1/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.80 U
				9/16/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/28/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1054MW7	8/1/2013	N	< 0.50 U	< 0.50 U	3.6	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
				9/11/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	1.5	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				9/16/2015	N	< 0.45 U	NA	< 0.96 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				7/27/2016	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				6/19/2017	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA



Appendix E-3
Historical Groundwater Analytical Results - 2013 through 2018
Laurel Bay Military Housing Area
MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLSs			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	
			Well ID	Sample Date	Sample Type	5	700	25	1000	10000	10	10	10	10	10	
1055 Gardenia Drive	191 Gardenia Drive	LTM	BEALB1055MW01	12/16/2015	N	< 0.45 U	3.6 J	39 J	< 0.48 U	0.32 J	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/16/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	
			BEALB1055MW02	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/16/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	
			BEALB1055MW03	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/16/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	
			BEALB1055MW04	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/15/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/25/2018	N	NA	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	
1059 Gardenia Drive	159 Gardenia Drive	LTM	BEALB1059MW01	12/16/2015	N	1.8 J	8.8	39 J	3.8 J	39	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
				8/3/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	
				6/19/2017	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	
				1/29/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	
			BEALB1059MW02	12/16/2015	N	< 0.45 U	2.7 J	10 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/3/2016	N	< 0.80 U	< 0.80 U	4.4	< 0.80 U	0.86 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/19/2017	N	< 0.80 U	< 0.80 U	3.2	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/29/2018	N	< 0.80 U	< 0.80 U	0.50 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
			BEALB1059MW03	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/3/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/16/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/29/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
			BEALB1059MW04	12/16/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				8/2/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				6/16/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
				1/29/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
BEALB1059MW05	3/24/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U			
	1/29/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U				
1102 Iris Lane	123 Iris Lane	NFA	BEALB1102MW01	7/26/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
1104 Iris Lane	141 Iris Lane	NFA	BEALB1104MW01	3/24/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
1124 Iris Lane	287 Iris Lane	LTM	BEALB1124MW01	3/24/2017	N	< 0.80 U	11	49	< 0.80 U	1.8	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				1/26/2018	N	< 0.80 U	5.1	24	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
1132 Iris Lane	345 Iris Lane	LTM	BEALB1132MW01	7/26/2016	N	< 0.80 U	5.4	33	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				6/16/2017	N	< 0.80 U	1.1	2.2	< 0.80 U	0.83 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
				1/25/2018	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
1133 Iris Lane	408 Iris Lane	NFA	BEALB1133MW01	7/26/2016	N	< 0.80 U	< 0.80 U	0.45 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U			
1144 Iris Lane	433 Iris lane	LTM	BEALB1144MW01	7/26/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
				6/16/2017	N	4.4	25	180	< 0.80 U	3.3	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		
				1/29/2018	N	4.0	19	130 J	< 0.80 U	0.42 J	< 0.50 UJ	< 0.50 UJ	0.21 J	< 0.50 UJ		
			BEALB1144MW02	7/26/2016	N	5.0	52	210	< 4.0 U	< 4.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		
				7/26/2016	FD	5.0	53	200	< 4.0 U	< 4.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		
				6/16/2017	N	5.4	58	230	< 0.80 U	3.1	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		
1/26/2018	N	2.8	23	110	< 0.80 U	< 0.80 U	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ	< 0.50 UJ						
1148 Iris lane	467 Iris lane	LTM	BEALB1148MW01	7/26/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
				6/16/2017	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
				1/29/2018	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
			BEALB1148MW02	7/26/2016	N/A	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP	NS - FP		
				6/16/2017	N	0.61 J	15	100	< 0.80 U	4.9	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		
1/29/2018	N	< 0.80 U	3.5	50 J	< 0.80 U	0.52 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ						
1168 Jasmine Street	40 Jasmine Street	NFA	BEALB1168MW01	12/17/2015	N	< 0.45 U	0.71 J	1.9 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
				12/17/2015	FD	< 0.45 U	0.46 J	1.4 J	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U		
			BEALB1168MW02	12/17/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
			BEALB1168MW04	12/17/2015	N	< 0.45 U	< 0.51 U	< 0.96 U	< 0.48 U	< 0.57 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U	
1186 Bobwhite Drive	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1186MW01	12/11/2017	N	< 0.80 U	< 0.80 U	0.40 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		
1192 Bobwhite Drive	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1192MW01	12/7/2017	N	< 0.80 U	< 0.80 U	1.6	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBLSs			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene
			Well ID	Sample Date	Sample Type	5	700	25	1000	10000	10	10	10	10	10
1194 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1194MW01	12/7/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1272 Albatross Drive	59 Albatross Drive	NFA	BEALB1272MW01	7/26/2016	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1352 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1352MW01	12/8/2017	N	< 0.80 U	1.4	12	< 0.80 U	0.47 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1356 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1356MW01	12/8/2017	N	< 0.80 U	3.9	18	< 0.80 U	2.9	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1359 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1359MW01	12/8/2017	N	< 0.80 U	15	110	< 0.80 U	16	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1360 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1360MW01	12/8/2017	N	2.6	30	100	< 0.80 U	25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1362 Cardinal Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1362MW01	12/8/2017	N	4.9	38	170	< 0.80 U	46	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
					FD	4.7	36	160	< 0.80 U	43	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1370 Cardinal Lane	Empty Lot	Pending Results of Newly Installed PMW (MW02)	BEALB1370MW01	12/8/2017	N	< 0.80 U	< 0.80 U	0.43 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1382 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1382MW01	12/8/2017	N	< 0.80 U	< 0.80 U	1.1	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 UJ
1384 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1384MW01	12/8/2017	N	0.59 J	3.3	6.9	< 0.80 U	2.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1385 Dove Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1385MW01	12/8/2017	N	< 0.80 U	19	88	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1389 Dove Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1389MW01	12/11/2017	N	< 0.80 U	16	82	< 0.80 U	23	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1392 Dove Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1392MW01	12/8/2017	N	< 0.80 U	11	60	0.47 J	42	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
					FD	< 0.80 U	11	61	0.41 J	41	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1393 Dove Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1393MW01	12/11/2017	N	< 0.80 U	10	40	< 0.80 U	4.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1407 Eagle Lane	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1407MW01	12/11/2017	N	< 0.80 U	4.3	31	44	3.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
					FD	< 0.80 U	4.4	32	46	3.4	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
1411 Eagle Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1411MW01	12/11/2017	N	< 0.80 U	2.5	15	0.72 J	9.6	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1418 Albatross Drive	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1418MW01	12/7/2017	N	< 0.80 U	1.6	11	< 0.80 U	1.1	0.19 J	< 0.10 UJ	< 0.10 UJ	0.11 J	< 0.10 UJ
1420 Albatross Drive	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1420MW01	12/7/2017	N	< 0.80 U	7.5	33	< 0.80 U	9.6	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1426 Albatross Drive	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1426MW01	12/7/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1429 Albatross Drive	Empty Lot	Pending SCDHEC Decision for LTM	BEALB1429MW01	12/7/2017	N	< 0.80 U	9.7	60	< 0.80 U	13	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1431 Dove Lane	480 Dove Lane	LTM	BEALB1431MW01	3/24/2017	N	< 0.80	0.86	69	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
				1/29/2018	N	< 0.80 U	< 0.80 U	29 J	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1434 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1434MW01	12/7/2017	N	< 0.80 U	0.50 J	6.5	< 0.80 U	< 0.80 U	0.18 J	< 0.10 UJ	< 0.10 UJ	0.092 J	< 0.10 UJ
1435 Dove Lane	500 Dove Lane	LTM	BEALB1435MW01	3/23/2017	N	7.4	65	240	13	300	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
				1/29/2018	N	5.2	42	180 J	2.9	77	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
					FD	4.8	40	150 J	2.5	64	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
1436 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1436MW01	12/7/2017	N	< 0.80 U	0.49 J	9.0	< 0.80 U	< 0.80 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1440 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1440MW01	12/7/2017	N	< 0.80 U	1.6	3.4	< 0.80 U	3.0	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1442 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1442MW01	12/7/2017	N	< 0.80 U	0.79 J	6.2	57	0.70 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
1444 Dove Lane	Empty Lot	Pending SCDHEC Decision for NFA	BEALB1444MW01	12/7/2017	N	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
1452 Cardinal Lane	567 Cardinal Lane	Pending Results of Newly Installed PMW (MW02)	BEALB1452MW01	3/23/2017	N	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10



Appendix E-3
 Historical Groundwater Analytical Results - 2013 through 2018
 Laurel Bay Military Housing Area
 MCAS Beaufort, South Carolina

Old Laurel Bay Military Housing Area Address	New Laurel Bay Military Housing Area Address	Property Status	SCDHEC RBSLs			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene		
			SCDHEC RBSLs			5	700	25	1000	10000	10	10	10	10	10		
			Well ID	Sample Date	Sample Type												
1472 Cardinal Lane	743 Cardinal Lane	LTM	BEALB1472MW130	8/2/2013	N	3.3	13	37	0.33 J	19	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ		
					FD	3.2	13	37	0.32 J	18	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	
			9/12/2014	N	5.6	17	36	0.40 J	14 J	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.80 U	
				FD	5.8	19	40	0.42 J	18	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.80 U	
			BEALB1472MW130R	3/24/2017	N	2.9	41	110	1.1	110	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
					FD	2.6	39	110	1.0	100	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
				6/19/2017	N	2.6	NA	74	NA	NA	NA	NA	NA	NA	NA	NA	NA
			1/30/2018	N	2.3	NA	62 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				FD	2.4	NA	56 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1472MW131	8/2/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				6/19/2017	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/30/2018	N	< 0.80 U	NA	0.98 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1472MW132	8/2/2013	N	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				6/16/2017	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/30/2018	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1472MW143	8/2/2013	N	< 0.25 U	< 0.25 U	3.8	< 0.25 U	< 0.25 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				6/16/2017	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/29/2018	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1472MW144	8/2/2013	N	< 0.25 U	< 0.25 U	4.1	< 0.25 U	< 0.25 U	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ	< 0.11 UJ
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				6/16/2017	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
				1/29/2018	N	< 0.80 U	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
			BEALB1472MW145	8/1/2013	N	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U
				9/12/2014	N	< 0.40 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.40 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.040 U	< 0.080 U
				6/16/2017	N	< 0.80 UJ	NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1/26/2018	N	< 0.80 U		NA	< 0.80 U	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Notes:
 All units are in micrograms per liter (µg/L)
 Bold font indicates the analyte was detected.
 Bold font and shading indicates the concentration exceeds the SC RBSL.
 * - The VOC analyses were inadvertently cancelled for sample BEAL148MW01 in January 2018; however, there was a duplicate sample collected at this location (BEALB148MW01-a). The results of the duplicate sample are valid, and therefore the duplicate sample result will be utilized as the primary sample result.
 FP - free product
 J - Estimated Value
 N/A - not applicable
 NA - not analyzed
 NS - not sampled
 Sample Type N = normal sample, FD = duplicate sample
 U or < = Non-detect at laboratory detection limit



Appendix F
Laboratory Analytical Report - Vapor

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: AECOM

Client Sample ID: BEALB119NS01GS20170508

Client Project ID: WE56 - 57 Banyan Drive / 60342031.FI.WI

ALS Project ID: P1702386

ALS Sample ID: P1702386-001

Test Code: EPA TO-15

Date Collected: 5/8/17

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Date Received: 5/18/17

Analyst: Cory Lewis

Date Analyzed: 5/22/17

Sampling Media: 1.0 L Summa Canister

Volume(s) Analyzed: 0.40 Liter(s)

Test Notes:

Container ID: 1SC00986

Initial Pressure (psig): -1.71

Final Pressure (psig): 6.55

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m ³	LOQ µg/m ³	LOD µg/m ³	MDL µg/m ³	Data Qualifier
71-43-2	Benzene	1.7	2.1	1.7	0.66	U
108-88-3	Toluene	1.4	2.1	1.7	0.70	J
100-41-4	Ethylbenzene	1.7	2.1	1.7	0.66	U
179601-23-1	m,p-Xylenes	3.5	4.1	3.5	1.2	U
95-47-6	o-Xylene	1.7	2.1	1.7	0.62	U
91-20-3	Naphthalene	1.4	2.1	1.8	0.74	J

U = Undetected at the limit of detection: The associated data value is the limit of detection, adjusted by any dilution factor used in the analysis.

LOQ = Limit of Quantitation - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the LOQ but greater than or equal to the MDL.

Appendix G
Regulatory Correspondence



C. Earl Hunter, Commissioner

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

May 12, 2009

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

Re: MCAS – Laurel Bay Housing –119 Banyan St.
Site ID # 04175
UST Closure Report received 24 April 2009
Beaufort County

Dear Mr. Ehde:

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

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

Should you have any questions, please contact me at 803-896-4179 or cookejt@dhec.sc.gov.

Sincerely,

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

cc: Region 8 District EQC



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management
Bureau of Land and Waste Management

August 6, 2015

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

RE: Approval Response to Comments and Concurrence with Final Initial Groundwater Investigation Report-July 2013
Laurel Bay Military Housing Area Multiple Properties
Dated June 2015

Dear Mr. Drawdy,

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

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 10 stated addresses. For the remaining 25 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

Attachment to: Petrus to Drawdy
 Subject: Draft Final Initial Groundwater Investigation Report-July 2013
 Specific Property Recommendations
 Dated August 6, 2015

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

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



July 21, 2016

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

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data from permanent monitoring well installations in the Draft Final Groundwater Assessment Report November and December 2015, Laurel Bay Military Housing Area for the addresses shown in the attachment. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

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

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

If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

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

Attachment: Specific Property Recommendations

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

Attachment to: Petrus to Drawdy
Subject: Draft Final Groundwater Assment Report-November and December 2015
Specific Property Recommendations
Dated July 21, 2016

Draft Final Initial Groundwater Assessment Report for (10 addresses)

Groundwater Monitoring recommendation (8 addresses)	
119 Banyan Drive	148 Laurel Bay Blvd
128 Banyan Drive	156 Laurel Bay Blvd
132 Banyan Drive	1055 Gardenia Drive
135 Birch Drive	1059 Gardenia Drive
No Further Action recommendation (2 addresses):	
1033 Foxglove Street	1168 Jasmine Street



September 24, 2018

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

RE: Approval Draft Final 2018 Groundwater Monitoring Report (LTM) Revision 1
Approved NFA 119 Banyan Drive and 1055 Gardenia Drive
Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced response to comments and Revision 1 change pages for the report on August 9, 2018. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

DHEC has reviewed the response to comments and revised report pages. Based on this review, DHEC has not generated additional comments. DHEC agrees with the recommendation of NFA for 119 Banyan Drive and 1055 Gardenia Drive.

Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
Department of Defense Corrective Action Section

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



August 29, 2018

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

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

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the Vapor Intrusion Investigation Report for multiple properties on July 30, 2018. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

DHEC has reviewed the Investigation Report and based on this review, DHEC did not generate any comments on the report. Please note that DHEC's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, DHEC retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

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

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