SUMMARY REPORT
328 EAGLE LANE (FORMERLY 1411 EAGLE LANE)
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



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**Naval Facilities Engineering Command Atlantic** 

9324 Virginia Avenue Norfolk, Virginia 23511-3095

Prepared by:



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

**Contract Number: N62470-14-D-9016** 

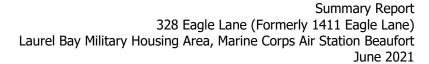
CTO WE52

**JUNE 2021** 



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### **List of Acronyms**

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon

PPV Public-Private Venture

QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UFP SAP Uniform Federal Policy Sampling and Analysis Plan
USEPA United States Environmental Protection Agency

UST underground storage tank

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).

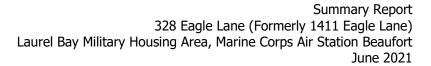
As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample 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 328 Eagle Lane (Formerly 1411 Eagle Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

### 1.1 Background Information

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





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

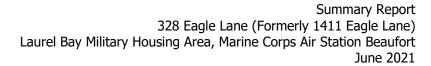
Capehart style homes within the LBMH area were formerly heated using heating oil stored in USTs at each residence. There were 1,100 Capehart style housing units in the LBMH area. The newer duplex homes within the LBMH area never utilized heating oil tanks. Heating oil has not been used at Laurel Bay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

In 2007, MCAS Beaufort began a voluntary program to remove the unregulated, residential 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 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.

In 2015, the Public-Private Venture (PPV) responsible for the management of the residential area at LBMH initiated a plan to replace outdated homes in the LBMH area. The plan includes the demolition of existing homes and subsequent construction of new homes. In discussions with the PPV it was revealed that construction of the new homes could occur on portions of the property where the USTs were formerly located. In response to this plan, MCAS Beaufort assessed subsurface soil gas concentrations in the area of the former USTs at select properties within the demolition areas. The subject property of this report is one of the properties within the planned demolition area which was selected for a soil gas evaluation. It should be noted that the house at the subject property has since been demolished and this property is an empty lot. There are no current plans for construction in this 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 free product and/ or COPCs is in excess of the SCDHEC RBSLs for groundwater. If COPCs and/or free product 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 is established. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

In accordance with the multi-media investigation selection process (Appendix A), groundwater analytical results are typically compared to the site specific groundwater vapor intrusion



screening levels (VISLs) to evaluate the potential for vapor intrusion (VI) into existing homes and the necessity for an investigation associated with this media. However, as previously stated, this property did not have an existing home and instead was among those selected for an evaluation of soil gas because of the planned demolition and potential for construction activities. Since this property was already selected for a VI investigation, groundwater analytical results from the permanent monitoring well were compared to the site specific groundwater VISLs as another line of evidence that VI is not a concern.

### 2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 328 Eagle Lane (Formerly 1411 Eagle Lane). The sampling activities at 328 Eagle Lane (Formerly 1411 Eagle Lane) comprised a soil investigation, IGWA sampling, installation and sampling of a permanent well, and a VI investigation. Details regarding the soil investigation at this site are provided in the SCDHEC UST Assessment Report - 1411 Eagle Lane (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 – May and June 2015* (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 installation and sampling activities at this site are provided in the Groundwater Assessment Report - November and December 2017 (Resolution Consultants, 2018). The laboratory report that includes the pertinent groundwater analytical results for this site is presented in Appendix D. Details regarding the VI investigation at this site are provided in the Vapor Intrusion Report - July 2015, January 2016, and May 2016 (Resolution Consultants, 2017). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix E.

### 2.1 UST Removal and Soil Sampling

In July 2009, two 280 gallon heating oil USTs were removed from the front grassed area at 328 Eagle Lane (Formerly 1411 Eagle Lane). Tank 1 was removed on July 29, 2009 and Tank 2 was removed on July 30, 2009. The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The USTs were 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 removals. According to the UST Assessment Report (Appendix B), the depths to the bases of the USTs were 6'4" bgs (Tank 1)



and 4'1" bgs (Tank 2) and a single soil sample was collected for each from those depths. The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removals, soil samples were collected from the bases of the excavations and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

### 2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST locations (Tanks 1 and 2) were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from the former UST locations (Tanks 1 and 2) at 328 Eagle Lane (Formerly 1411 Eagle Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated May 15, 2014, SCDHEC requested an IGWA for 328 Eagle Lane (Formerly 1411 Eagle Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix F.

### 2.3 Initial Groundwater Sampling

On June 19, 2015, two temporary monitoring wells were installed at 328 Eagle Lane (Formerly 1411 Eagle Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring wells were placed in the same general location as the former heating oil USTs (Tanks 1 and 2). The former UST locations are indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – May and June 2015* (Resolution Consultants, 2015).



The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring wells. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary wells were abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71.H-I (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – May and June 2015* (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 TW01 at 328 Eagle Lane (Formerly 1411 Eagle Lane) were greater than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated further investigation was required. In a letter dated February 22, 2016, SCDHEC requested a permanent well be installed for 328 Eagle Lane (Formerly 1411 Eagle Lane) to confirm the impact to groundwater detected in the temporary well. SCDHEC's request letter is provided in Appendix F.

### 2.5 Permanent Well Groundwater Sampling

On December 4, 2017, a permanent monitoring well was installed at 328 Eagle Lane (Formerly 1411 Eagle Lane), 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 (Tank 1) and the IGWA sample location (TW01). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Groundwater Assessment Report – November and December 2017* (Resolution Consultants, 2018).

The sampling strategy for this phase of the investigation required a one-time sampling event of the permanent monitoring well. 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 2017* (Resolution Consultants, 2018).



### 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 report is included in Appendix D.

The groundwater results collected from 328 Eagle Lane (Formerly 1411 Eagle Lane) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 3), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

### 2.7 Soil Gas Sampling

On July 27, 2015, a temporary subsurface soil gas well was installed at 328 Eagle Lane (Formerly 1411 Eagle Lane) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media, Revision 1* (Resolution Consultants, 2015). Soil gas sampling was conducted at this property to assess the potential risk for vapor intrusion associated with the possible construction of a new home on top of former the UST location. The soil gas well 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). Further details are provided in the *Vapor Intrusion Report – July 2015, January 2016, and May 2016* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the soil gas well. The subsurface soil gas well at 328 Eagle Lane (Formerly 1411 Eagle Lane) was sampled on July 29, 2015. 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 well was abandoned in accordance with the *UFP SAP for Vapor Media, Revision 1* (Resolution Consultants, 2015). Field forms are provided in the *Vapor Intrusion Report – July 2015, January 2016, and May 2016* (Resolution Consultants, 2017).

### 2.8 Soil Gas Analytical Results

A summary of the laboratory analytical results and United States Environmental Protection Agency (USEPA) VISLs is presented in Table 4. A copy of the laboratory analytical data report is included in Appendix E.



The soil gas results collected from 328 Eagle Lane (Formerly 1411 Eagle Lane) were below the USEPA VISLs, which indicated that 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

The house at 328 Eagle Lane (Formerly 1440 West Dove Lane) was demolished and the property is an empty lot. There are no current plans for construction in this area. Based on the analytical results for groundwater collected from the permanent monitoring well, SCDHEC made the determination that NFA was required for 328 Eagle Lane (Formerly 1411 Eagle Lane). The NFA determination for groundwater was obtained in a letter dated June 18, 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 328 Eagle Lane (Formerly 1440 West Dove Lane) in a letter dated June 20, 2017. SCDHEC's letters are provided in Appendix F.

### 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report 1411 Eagle Lane, Laurel Bay Military Housing Area*, October 2009.
- Resolution Consultants, 2015. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media for Laurel Bay Military Housing Area, Revision 1, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2015.
- Resolution Consultants, 2015. *Initial Groundwater Investigation Report May and June 2015*for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing
  Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, November 2015.
- Resolution Consultants, 2017. *Vapor Intrusion Report July 2015, January 2016, and May 2016 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, May 2017.



- Resolution Consultants, 2018. *Groundwater Assessment Report November and December*2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military

  Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, March 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, 2015. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator, Version 3.4,* June 2015.

### **Tables**



### Table 1

### Laboratory Analytical Results - Soil 328 Eagle Lane (Formerly 1411 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort

Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 07/29/09 and 07/30/09		
	333.135.1352	1411 Eagle-1 07/29/09	1411 Eagle-2 07/30/09	
Volatile Organic Compounds Analyz	ed by EPA Method 8260B (mg/kg)	•	•	
Benzene	0.003	0.00691	ND	
Ethylbenzene	1.15	1.96	ND	
Naphthalene	0.036	27.1	9.27	
Гoluene	0.627	ND	ND	
Kylenes, Total	13.01	13.4	0.860	
Semivolatile Organic Compounds A	nalyzed by EPA Method 8270D (mg/k	g)		
Benzo(a)anthracene	0.66	ND	ND	
Benzo(b)fluoranthene	0.66	ND	ND	
Benzo(k)fluoranthene	0.66	ND	ND	
Chrysene	0.66	ND	ND	
Dibenz(a,h)anthracene	0.66	ND	ND	

### Notes:

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

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

# Table 2 Laboratory Analytical Results - Groundwater 328 Eagle Lane (Formerly 1411 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater	Results Samples Collected 06/18/15		
		VISLs <sup>(2)</sup>	TW01	TW02	
Volatile Organic Compounds Analyze	d by EPA Method 8260B	(μg/L)	1		
Benzene	5	16.24	ND	ND	
Ethylbenzene	700	45.95	37	ND	
Naphthalene	25	29.33	190	1.5	
Toluene	1000	105,445	0.58	ND	
Xylenes, Total	10,000	2,133	68	ND	
Semivolatile Organic Compounds Ana	alyzed by EPA Method 8	270D (µg/L)			
Benzo(a)anthracene	10	NA	ND	ND	
Benzo(b)fluoranthene	10	NA	ND	ND	
Benzo(k)fluoranthene	10	NA	ND	ND	
Chrysene	10	NA	ND	ND	
Dibenz(a,h)anthracene	10	NA	ND	ND	

### Notes:

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

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

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

#### Table 3

# Laboratory Analytical Results - Permanent Well Groundwater 328 Eagle Lane (Formerly 1411 Eagle Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs <sup>(2)</sup>	Results Sample Collected 12/11/17			
Volatile Organic Compounds Analyzed by EPA Method 8260B (μg/L)						
Benzene	5	16.24	ND			
Ethylbenzene	700	45.95	2.5			
Naphthalene	25	29.33	15			
Toluene	1000	105,445	0.72			
Xylenes, Total	10,000	2,133	9.6			
Semivolatile Organic Compounds Ana	alyzed by EPA Method 82	270D (µg/L)				
Benzo(a)anthracene	10	NA	ND			
Benzo(b)fluoranthene	10	NA	ND			
Benzo(k)fluoranthene	10	NA	ND			
Chrysene	10	NA	ND			
Dibenz(a,h)anthracene	10	NA	ND			

### Notes:

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

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

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

# Table 4 Laboratory Analytical Results - Vapor

# 328 Eagle Lane (Formerly 1411 Eagle Lane)

### Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	USEPA VISL (1)	Results Sample Collected 07/29/15
<b>Volatile Organic Compounds Analyze</b>	(µg/m³)	
Benzene	12	0.49
Toluene	17000	14
Ethylbenzene	37	5.7
m,p-Xylenes	350	28
o-Xylene	350	7.7
Naphthalene	2.8	0.97

### **Notes:**

VISLs are based on a residual exposure scenario and a target risk level of  $1 \times 10^{-6}$  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.

The vapor laboratory report is provided in Appendix E.

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

USEPA - United States Environmental Protection Agency

VISL - Vapor Intrusion Screening Level

<sup>&</sup>lt;sup>(1)</sup> United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (Version 3.4, June 2015).

# Appendix A Multi-Media Selection Process for LBMH





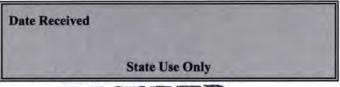
**Appendix A - Multi-Media Selection Process for LBMH** 

# Appendix B UST Assessment Report



# South Carolina Department of Health and Environmental Control (SCDHEC)

## Underground Storage Tank (UST) Assessment Report



State Use Only

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OCT 0 8 2009

SC DIVISC - Bureau of Land & Waste Management Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

	ommanding Officer At on, Individual, Public Agency, O	
P.O. Box 55001		
Mailing Address		
Beaufort,	South Caroli	na 29904-5001
City	State	Zip Code
843	228-731	.7 Craig E
Area Code	Telephone Numb	er Contact Pers

## II. SITE IDENTIFICATION AND LOCATION

, SC
-

Attachment 2

# III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on at Permit ID Number may qualify to receive state monies to pay for appropriate site rehabilitation activities. Before participation is allowed in the State Clean-up fund, written confirmation of the existence or non-existence of an environmental insurance policy is required. This section must be completed.
Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES NO (check one)
If you answered YES to the above question, please complete the following information:
My policy provider is: The policy deductible is: The policy limit is:
If you have this type of insurance, please include a copy of the policy with this report.
IV. REQUEST FOR SUPERB FUNDING  I DO / DO NOT wish to participate in the SUPERB Program. (Circle one.)
V. CERTIFICATION (To be signed by the UST owner)
I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.
Name (Type or print.)
Signature
To be completed by Notary Public:
Sworn before me this day of, 20
(Name)
Notary Public for the state of  Please affix State seal if you are commissioned outside South Carolina

VI. UST INFORMATION	1411Eagle-1	1411Eagle-2
Product(ex. Gas, Kerosene)	Heating oil	Heating oil
Capacity(ex. 1k, 2k)	280 gal	280 gal
Age	Late 1950s	Late 1950s
Construction Material(ex. Steel, FRP)	Steel	Steel
Month/Year of Last Use	Mid 1980s	Mid 1980s
Depth (ft.) To Base of Tank	6'4"	4'1"
Spill Prevention Equipment Y/N	No	No
Overfill Prevention Equipment Y/N	No	No
Method of Closure Removed/Filled	Removed	Removed
Date Tanks Removed/Filled	7/29/09	7/30/09
Visible Corrosion or Pitting Y/N	Yes	Yes
Visible Holes Y/N	Yes	Yes
Method of disposal for any USTs removed from t UST 1411Eagle-1 was removed from		
UST 1411Eagle-2 was removed from Subtitle "D" landfill. See Attac	<del>_</del>	disposed of at a
Method of disposal for any liquid petroleum, sluddisposal manifests) UST 1411Eagle-1's contaminated		,
Beaufort. UST 1411Eagle-2 had been previo	ously filled with	sand by others

Corrosion, pitting and holes were found throughout both tanks.

# VII. PIPING INFORMATION

	1411Eagle-1	1411Eagle-2
	Steel	Steel
Construction Material(ex. Steel, FRP)	& Copper	& Copper
Distance from UST to Dispenser	N/A	N/A
Number of Dispensers	N/A	N/A
Type of System Pressure or Suction	Suction	Suction
Was Piping Removed from the Ground? Y/N	Yes	*Yes
Visible Corrosion or Pitting Y/N	Yes	*Unknown
· ·	No	*Unknown
Visible Holes Y/N	Late 1950s	Late 1950s
Age		
If any corrosion, pitting, or holes were observed,	describe the location and	d extent for each piping ru
UST 1411Eagle-1's steel vent p	ipe was corroded	and pitted, but the
copper supply and return lines	were sound.	
*All of UST 1411Eagle-2's pipir	ng was previously	removed by other
VIII. BRIEF SITE DESC		
The USTs at the residences are		
and formerly contained fuel oil	_	
installed in the late 1950s and	last used in the	mid 1980s.

# IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?		Х	
If yes, indicate depth and location on the site map.			
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?		x	
If yes, indicate location on site map and describe the odor (strong, mild, etc.)			
C. Was water present in the UST excavation, soil borings, or trenches?		Х	
If yes, how far below land surface (indicate location and depth)?			
D. Did contaminated soils remain stockpiled on site after closure?		Х	
If yes, indicate the stockpile location on the site map.			
Name of DHEC representative authorizing soil removal:			
E. Was a petroleum sheen or free product detected on any excavation or boring waters?		х	1
If yes, indicate location and thickness.			

# X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 96012001

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1411 Eagle-1	Excav at fill end	Soil	Sandy	6'4"	7/29/09 1425hrs	P. Shaw	- 40.5.
	Excav at fill end		Sandy	4'1"	7/30/09 0945hrs	P. Shaw	
	_						
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> Depth Below the Surrounding Land Surface

## XI. SAMPLING METHODOLOGY

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

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

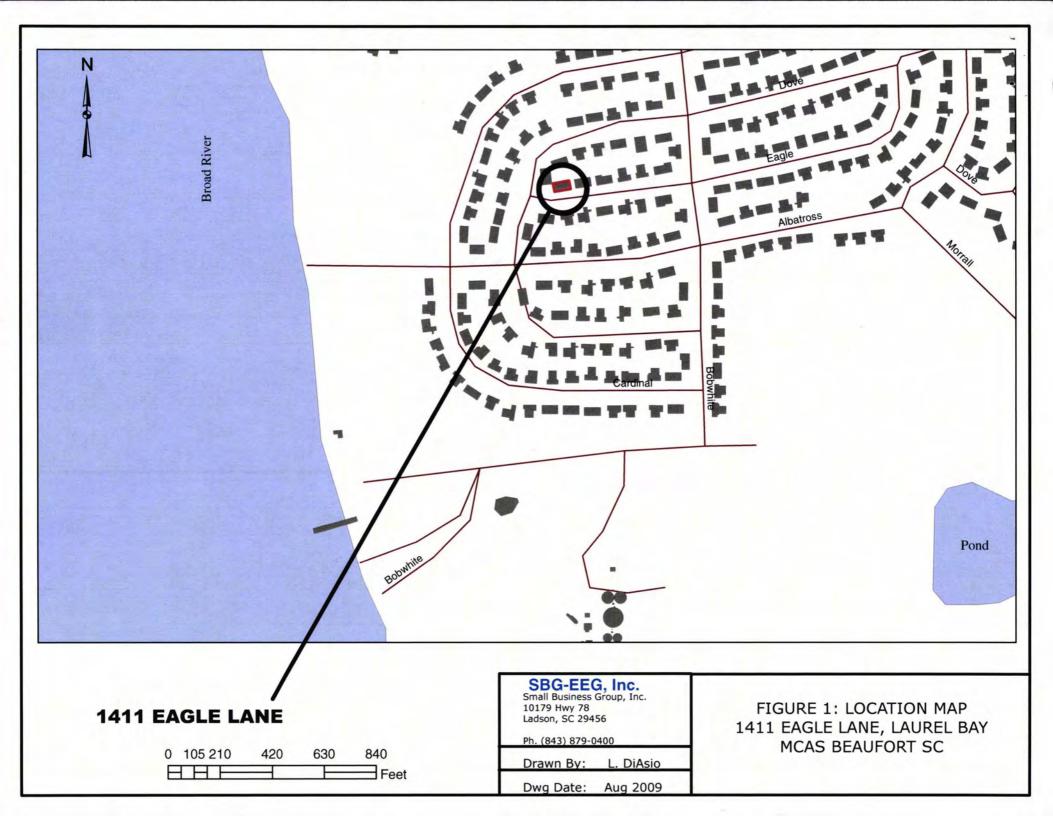
# XII. RECEPTORS

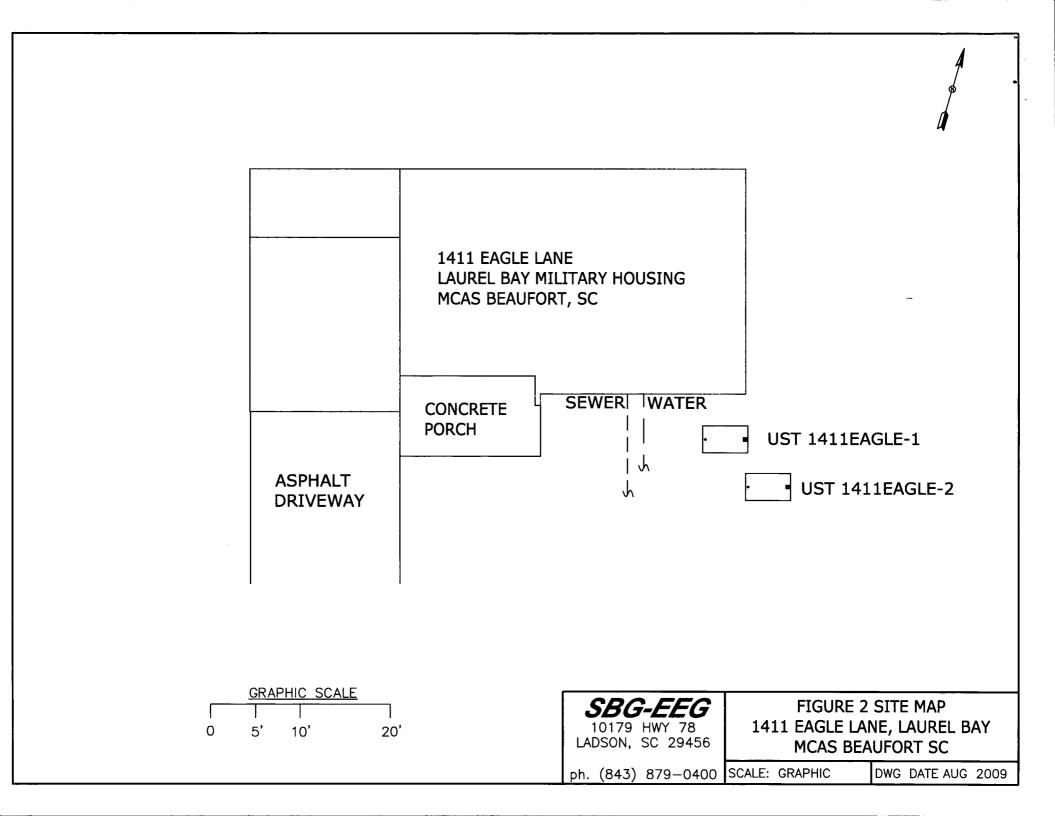
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		Х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?  *Sewer & water	*X	
	If yes, indicate the type of utility, distance, and direction on the site map.		;
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		х
	If yes, indicate the area of contaminated soil on the site map.		

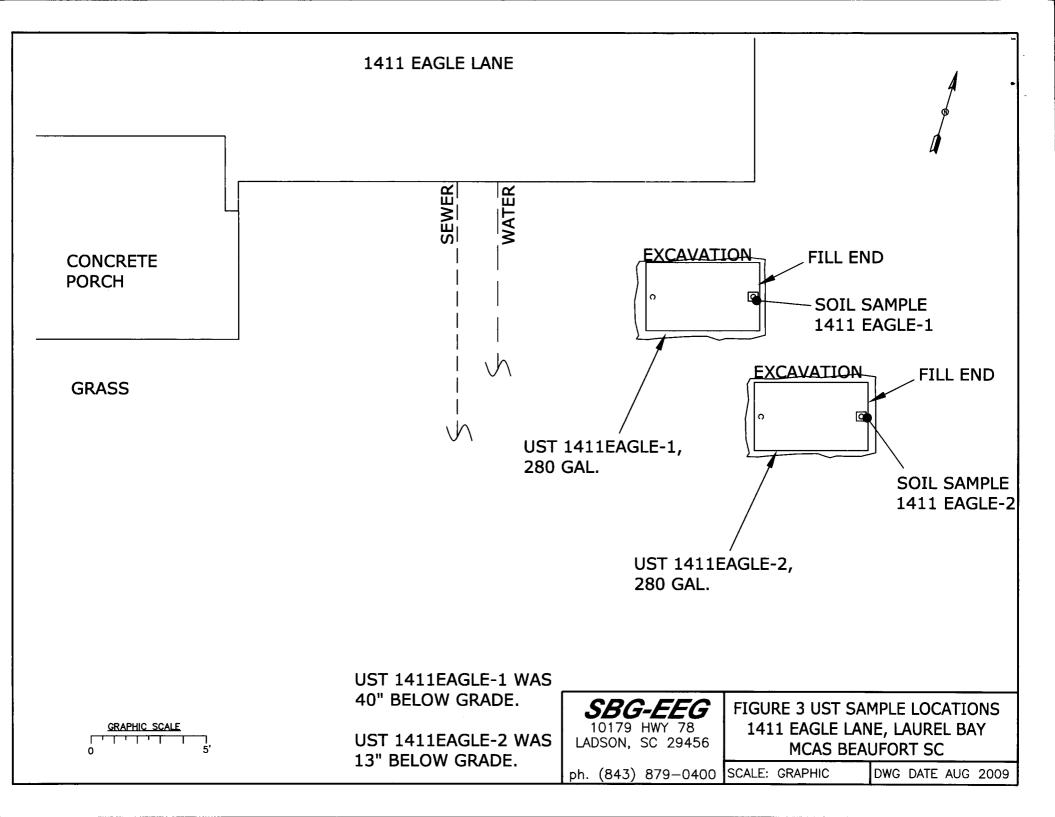
# XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: UST 1411 Eagle-1 and -2's location.



Picture 2: Removal of Concrete cover over UST 1411 Eagle-1



Picture 3: Containment of UST 1411 Eagle-2



Picture 4: Site after completion of work.

# XIV. SUMMARY OF ANALYSIS RESULTS

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

						=
CoC UST	1411Eagle-1		1411Ea	agle-2		
Benzene	0.00691 mg/kg			ND		
Toluene	ND		ND			
Ethylbenzene	1.96 mg/kg		ND			
Xylenes	13.4 mg/kg		0.860 mg/kg			
Naphthalene	27.1 mg/kg		9.27 mg/kg			
Benzo (a) anthracene	ND		:	ND		
Benzo (b) fluoranthene	ND		ND			
Benzo (k) fluoranthene	ND		N			
Chrysene	ND.	-	ND			
Dibenz (a, h) anthracene	ND		ND			
TPH (EPA 3550)						
СоС					 	
Benzene						
Toluene						
Ethylbenzene						
Xylenes						
Naphthalene						
Benzo (a) anthracene						
Benzo (b) fluoranthene						
Benzo (k) fluoranthene						
Chrysene						
Dibenz (a, h) anthracene						
TPH (EPA 3550)						

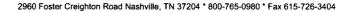
SUMMARY OF ANALYSIS RESULTS (cont'd)
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

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				
мтве	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)





August 17, 2009

4:06:14PM

Client:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn:

Tom McElwee

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Nbr: P/O Nbr: Date Received: [none] 08087

07/31/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1409 Eagle	NSG2788-01	07/29/09 09:50
1406 Eagle	NSG2788-02	07/29/09 09:45
1412 Eagle	NSG2788-03	07/29/09 14:10
1411 Eagle-1	NSG2788-04	07/29/09 14:25
1411 Eagle-2	NSG2788-05	07/30/09 09:45
1413 Albatross	NSG2788-06	07/30/09 10:15
1414 Albatross	NSG2788-07	07/30/09 14:15
1422 Albatross	NSG2788-08	07/30/09 13:45

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.

South Carolina Certification Number: 84009001

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

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

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

Estimated uncertainty is available upon request.

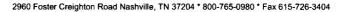
athy Gartner

This report has been electronically signed.

Report Approved By:

Cathy Gartner

Project Management





THE LEADER IN ENVIRONMENTAL TESTING

EEG - Small Business Group, Inc. (2449) Client

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

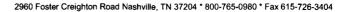
Project Name:

Laurel Bay Housing Project

Project Number: [none] Received:

07/31/09 08:15

Analyte	Result	Flag Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSG2788-01 (1409 Eag	gle - Soil) Sam	oled: 07/29/09 09:50					
General Chemistry Parameters							
% Dry Solids	82.4	<del>0</del> / <sub>0</sub>	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Method	8260B					
Benzene	ND	mg/kg <b>dr</b> y	0.00231	1	08/09/09 16:05	SW846 8260B	9080050
Ethylbenzene	ND	mg/kg dry	0.00231	1	08/09/09 16:05	SW846 8260B	9080050
Naphthalene	ND	mg/kg dry	0.00577	1	08/09/09 16:05	SW846 8260B	9080050
Toluene	ND	mg/kg dry	0.00231	1	08/09/09 16:05	SW846 8260B	9080050
Xylenes, total	ND	mg/kg dry	0.00577	1	08/09/09 16:05	SW846 8260B	9080050
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %				08/09/09 16:05	SW846 8260B	9080050
Surr: Dibromofluoromethane (75-125%)	100 %				08/09/09 16:05	SW846 8260B	908005
Surr: Toluene-d8 (76-129%)	104 %				08/09/09 16:05	SW846 8260B	908005
Surr: 4-Bromofluorobenzene (67-147%)	103 %				08/09/09 16:05	SW846 8260B	9080050
Polyaromatic Hydrocarbons by EPA 82	270D						
Acenaphthene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Acenaphthylene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Anthracene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Benzo (a) anthracene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Benzo (a) pyrene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Benzo (b) fluoranthene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Benzo (k) fluoranthene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Chrysene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Dibenz (a,h) anthracene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Fluoranthene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Fluorene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Naphthalene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Phenanthrene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Pyrene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
1-Methylnaphthalene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
2-Methylnaphthalene	ND	mg/kg dry	0.0813	1	08/13/09 21:09	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	93 %				08/13/09 21:09	SW846 8270D	908128
Surr: 2-Fluorobiphenyl (14-120%)	75 %				08/13/09 21:09	SW846 8270D	908128
Surr: Nitrobenzene-d5 (17-120%)	77 %				08/13/09 21:09	SW846 8270D	908128





THE LEADER IN ENVIRONMENTAL TESTING

EEG - Small Business Group, Inc. (2449) Client

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

[none] Project Number:

Received: 07/31/09 08:15

ANALYTICAL I	REPORT
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Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
· · · · · · · · · · · · · · · · · · ·								Date
Sample ID: NSG2788-02 (1406 Eas	gle - Soil) Sam	pled: 07/2	29/09 09:45					
General Chemistry Parameters								
% Dry Solids	76.9		%	0.500	1	08/12/09 13:02	SW-846	9081650
Selected Volatile Organic Compounds	by EPA Method	18260B						
Benzene	ND		mg/kg dry	0.00225	1	08/09/09 16:35	SW846 8260B	9080050
Ethylbenzene	ND	RL1	mg/kg dry	0.119	50	08/10/09 14:02	SW846 8260B	908019
Naphthalene	2.44		mg/kg dry	0.298	50	08/10/09 14:02	SW846 8260B	9080198
Toluene	ND	RL1	mg/kg dry	0.119	50	08/10/09 14:02	SW846 8260B	908019
Xylencs, total	0.450		mg/kg dry	0.298	50	08/10/09 14:02	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	118 %		00,			08/09/09 16:35	SW846 8260B	908005
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %					08/10/09 14:02	SW846 8260B	908019
Surr: Dibromofluoromethane (75-125%)	117 %					08/09/09 16:35	SW846 8260B	908005
Surr: Dibromofluoromethane (75-125%)	96 %					08/10/09 14:02	SW846 8260B	908019
Surr: Toluene-d8 (76-129%)	127 %					08/09/09 16:35	SW846 8260B	908005
Surr: Toluene-d8 (76-129%)	92 %					08/10/09 14:02	SW846 8260B	908019
Surr: 4-Bromofluorobenzene (67-147%)	231 %	ZX				08/09/09 16:35	SW846 8260B	908005
Surr: 4-Bromofluorobenzene (67-147%)	109 %					08/10/09 14:02	SW846 8260B	908019
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	1.51		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Acenaphthylene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Anthracene	1.25		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Benzo (a) anthracene	0.227		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Benzo (a) pyrene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Benzo (b) fluoranthene	0.0990		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081283
Benzo (k) fluoranthene	0.0892		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081283
Chrysene	0.272		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	9081287
Fluoranthene	0.983		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
Fluorene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
Naphthalene	1.92		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
Phenanthrene	42.2		mg/kg dry	0.858	10	08/14/09 13:41	SW846 8270D	908128
Pyrene	1.37		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
1-Methylnaphthalene	117		mg/kg dry	3.43	40	08/14/09 15:57	SW846 8270D	908128
2-Methylnaphthalene	4.09		mg/kg dry	0.0858	1	08/13/09 21:32	SW846 8270D	908128
Surr: Terphenyl-d14 (18-120%)	208 %	ZX		3.0020	•	08/13/09 21:32	SW846 8270D	908128
Surr: 2-Fluorobiphenyl (14-120%)	179 %	ZX				08/13/09 21:32	SW846 8270D	908128
Surr: Nitrobenzene-d5 (17-120%)	123 %	ZX				08/13/09 21:32	SW846 8270D	908128





10179 Highway 78

Client

Attn

Ladson, SC 29456 Tom McElwee

EEG - Small Business Group, Inc. (2449)

Work Order:

NSG2788

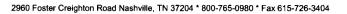
Project Name:

Laurel Bay Housing Project

Project Number: [none] Received:

07/31/09 08:15

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSG2788-03 (1412 Eag	gle - Soil) Sam	pled: 07/2	29/09 14:10					
General Chemistry Parameters								
% Dry Solids	86.8		9/0	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Method	1 8260B						
Benzene	0.379		mg/kg dry	0.110	50	08/10/09 14:33	SW846 8260B	9080198
Ethylbenzene	3.73		mg/kg dry	0.110	50	08/10/09 14:33	SW846 8260B	9080198
Naphthalene	46.1		mg/kg dry	5.48	1000	08/10/09 15:04	SW846 8260B	9080198
Toluene	ND	RL1	mg/kg dry	0.110	50	08/10/09 14:33	SW846 8260B	9080198
Xylenes, total	15.1		mg/kg dry	0.274	50	08/10/09 14:33	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	99 %					08/10/09 14:33	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	99 %					08/10/09 15:04	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	98 %					08/10/09 14:33	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	97 %					08/10/09 15:04	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	100 %					08/10/09 14:33	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	95 %					08/10/09 15:04	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	112 %					08/10/09 14:33	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	102 %					08/10/09 15:04	SW846 8260B	9080198
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	11.0		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Acenaphthylene	4.79		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Anthracene	3.36		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Benzo (a) anthracene	ND	RLI	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Benzo (a) pyrene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Benzo (b) fluoranthene	ND	RLI	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Benzo (k) fluoranthene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Chrysene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Dibenz (a,h) anthracene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Fluoranthene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Fluorene	19.2		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Naphthalene	36.4		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Phenanthrene	30.0		mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
Pyrene	ND	RL1	mg/kg dry	3.03	20	08/14/09 14:04	SW846 8270D	9081287
1-Methylnaphthalene	136		mg/kg dry	7.57	50	08/15/09 21:34	SW846 8270D	9081287
2-Methylnaphthalene	227		mg/kg dry	7.57	50	08/15/09 21:34	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	87 %	ZX		,,	50	08/14/09 14:04	SW846 8270D	9081287
Surr: 2-Fluorobiphenyl (14-120%)	127 %	ZX ZX				08/14/09 14:04	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	122 %	ZX				08/14/09 14:04	SW846 8270D	9081287





THE LEADER IN ENVIRONMENTAL TESTING

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number: Received: [none] 07/31/09 08:15

			ANALYTICAL RE	PURT				
Accellants				MDI	Dilution	Analysis	3.6 Al 3	
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSG2788-04 (1411 Ea	gle-1 - Soil) Sa	ampled: 0'	7/29/09 14:25					
General Chemistry Parameters								
% Dry Solids	72.5		%	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Method	1 8260B						
Benzene	0.00691		mg/kg dry	0.00279	1	08/09/09 17:37	SW846 8260B	9080050
Ethylbenzene	1.96		mg/kg dry	0.135	50	08/10/09 15:35	SW846 8260B	9080198
Naphthalene	27.1		mg/kg dry	6.75	1000	08/10/09 16:05	SW846 8260B	9080198
Toluene	ND	DI 1						
		RL1	mg/kg dry	0.135	50	08/10/09 15:35	SW846 8260B	9080198
Xylenes, total	13.4		mg/kg dry	0.337	50	08/10/09 15:35	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					08/09/09 17:37	SW846 8260B	9080050
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %					08/10/09 15:35	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					08/10/09 16:05	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	108 %					08/09/09 17:37	SW846 8260B	9080050
Surr: Dibromofluoromethane (75-125%)	95 %					08/10/09 15:35	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	97 %	71				08/10/09 16:05	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%) Surr: Toluene-d8 (76-129%)	604 % 106 %	ZX				08/09/09 17:37	SW846 8260B	9080050
Surr: Toluene-do (76-129%) Surr: Toluene-d8 (76-129%)	98 %					08/10/09 15:35	SW846 8260B	9080198 9080198
Surr: 4-Bromofluorobenzene (67-147%)	610 %	ZX				08/10/09 16:05	SW846 8260B SW846 8260B	9080050
Surr: 4-Bromofluorobenzene (67-147%)	119 %	ZA				08/09/09 17:37 08/10/09 15:35	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	104 %					08/10/09 15:35	SW846 8260B	9080198
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Acenaphthylene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Anthracene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
		RL1		1.82				9081287
Benzo (a) anthracene	ND		mg/kg dry		20	08/14/09 14:26	SW846 8270D	
Benzo (a) pyrene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Benzo (b) fluoranthene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Benzo (k) fluoranthene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Chrysene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Dibenz (a,h) anthracene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Fluoranthene	3.60		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Fluorene	4.43		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	ND	RL1	mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Naphthalene	13.6		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Phenanthrene	9.03		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Pyrene	2.46		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
•	43.5				20			
1-Methylnaphthalene			mg/kg dry	1.82		08/14/09 14:26	SW846 8270D	9081287
2-Methylnaphthalene	64.6		mg/kg dry	1.82	20	08/14/09 14:26	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	80 %					08/14/09 14:26	SW846 8270D	9081287
Surr: 2-Fluorobiphenyl (14-120%)	95 %					08/14/09 14:26	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	89 %					08/14/09 14:26	SW846 8270D	9081287





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Client

Attn

Work Order:

NSG2788

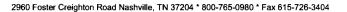
Project Name:

Laurel Bay Housing Project

[none] Project Number:

Received: 07/31/09 08:15

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
·								
Sample ID: NSG2788-05 (1411 Eag General Chemistry Parameters	(1e-2 - S011) S2	ımpiea: v	//30/09 09:45					
% Dry Solids	82.6		%	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	ov EPA Method	1 8260B						
Benzene	ND		mg/kg dry	0.00195	1	08/10/09 13:01	SW846 8260B	9080198
Ethylbenzene	ND	RL1	mg/kg dry	0.104	50	08/10/09 13:32	SW846 8260B	9080198
Naphthalene	9.27		mg/kg dry	0.260	50	08/10/09 13:32	SW846 8260B	9080198
Toluenc	ND	RL1	mg/kg dry	0.104	50	08/10/09 13:32	SW846 8260B	9080198
Xylenes, total	0.860	1121	mg/kg dry	0.260	50	08/10/09 13:32	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	120 %		mg/kg dry	0.200	20	08/10/09 13:01	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					08/10/09 13:32	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	114 %					08/10/09 13:01	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	98 %					08/10/09 13:32	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	119 %					08/10/09 13:01	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	98 %					08/10/09 13:32	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	224 %	ZX				08/10/09 13:01	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/10/09 13:32	SW846 8260B	9080198
Polyaromatic Hydrocarbons by EPA 82	70D							
Acenaphthene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Acenaphthylene	ND	RLI	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Anthracene	ND	RLI	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Benzo (a) anthracene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Benzo (a) pyrene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Benzo (b) fluoranthene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Benzo (k) fluoranthene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Chrysene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Dibenz (a,h) anthracene	ND	RLI	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Fluoranthene	ND		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Fluorene	3.68		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Naphthalene	3.37		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Phenanthrene	6.33		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Pyrene	ND	RL1	mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
1-Methylnaphthalene	16.5		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
2-Methylnaphthalene	21.7		mg/kg dry	1.58	20	08/14/09 14:49	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	65 %		ing/kg di y	1.50	20	08/14/09 14:49	SW846 8270D	9081287
Surr: 1erpnenyi-u14 (16-120%) Surr: 2-Fluorobiphenyl (14-120%)	70 %					08/14/09 14:49	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	46 %					08/14/09 14:49	SW846 8270D	9081287





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

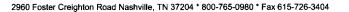
Project Name:

Laurel Bay Housing Project

Project Number: Received: [none]

i: 07/31/09 08:15

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
		_						
Sample ID: NSG2788-06 (1413 Alt	patross - Soil)	Sampled:	07/30/09 10:15					
General Chemistry Parameters								
% Dry Solids	78.0		%	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Method	l 8260B						
Benzene	ND	RLi	mg/kg dry	0.117	50	08/10/09 16:36	SW846 8260B	9080198
Ethylbenzene	0.791		mg/kg dry	0.117	50	08/10/09 16:36	SW846 8260B	9080198
Ethylbenzene	0.812		mg/kg dry	0.233	100	08/11/09 14:09	SW846 8260B	9081549
Naphthalene	15.8		mg/kg dry	0.583	100	08/11/09 14:09	SW846 8260B	9081549
Toluene	0.179		mg/kg dry	0.117	50	08/10/09 16:36	SW846 8260B	9080198
Xylenes, total	3.19		mg/kg dry	0.291	50	08/10/09 16:36	SW846 8260B	9080198
Xylenes, total	3.45		mg/kg dry	0.583	100	08/11/09 14:09	SW846 8260B	9081549
Surr: 1,2-Dichloroethane-d4 (67-138%)	99 %					08/10/09 16:36	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	97 %					08/11/09 14:09	SW846 8260B	9081549
Surr: Dibromofluoromethane (75-125%)	96 %					08/10/09 16:36	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	98 %					08/11/09 14:09	SW846 8260B	9081549
Surr: Toluene-d8 (76-129%)	103 %					08/10/09 16:36	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	106 %					08/11/09 14:09	SW846 8260B	9081549
Surr: 4-Bromofluorobenzene (67-147%)	100 %					08/10/09 16:36	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	109 %					08/11/09 14:09	SW846 8260B	9081549
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	0.196		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Acenaphthylene	0.0911		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Anthracene	0.128		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Benzo (a) anthracene	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Benzo (a) pyrenc	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Benzo (b) fluoranthene	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Benzo (k) fluoranthene	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Chrysene	ND		mg/kg dry	0.0855	, 1	08/13/09 23:03	SW846 8270D	9081287
=	ND ND			0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Dibenz (a,h) anthracene			mg/kg dry					
Fluoranthene	0.189		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Fluorene	0.495		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Naphthalene	0.788		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Phenanthrene	1.00		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Pyrene	0.200		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
1-Methylnaphthalene	2.81		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
2-Methylnaphthalene	4.01		mg/kg dry	0.0855	1	08/13/09 23:03	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	96 %					08/13/09 23:03	SW846 8270D	9081287
Surr: 2-Fluorobiphenyl (14-120%)	69 %					08/13/09 23:03	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	72 %					08/13/09 23:03	SW846 8270D	9081287





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

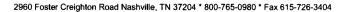
Laurel Bay Housing Project

Project Number: [none]

Received:

07/31/09 08:15

			ANALYTICAL REPO	ORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSG2788-07 (1414 Alb	oatross - Soil) S	Sampled:	07/30/09 14:15					
General Chemistry Parameters								
% Dry Solids	86.3		%	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	0.124		mg/kg dry	0.122	50	08/10/09 17:07	SW846 8260B	9080198
Ethylbenzene	1.72		mg/kg dry	0.122	50	08/10/09 17:07	SW846 8260B	9080198
Naphthalene	5.83		mg/kg dry	0.306	50	08/10/09 17:07	SW846 8260B	9080198
Toluene	1.28		mg/kg dry	0.122	50	08/10/09 17:07	SW846 8260B	9080198
Xylenes, total	6.43		mg/kg dry	0.306	50	08/10/09 17:07	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	98 %		00,			08/10/09 17:07	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	95 %					08/10/09 17:07	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	100 %					08/10/09 17:07	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	105 %					08/10/09 17:07	SW846 8260B	9080198
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	ND		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Acenaphthylene	ND		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Anthracene	ND		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Benzo (a) anthracene	3.26		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Benzo (a) pyrene	0.946		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Benzo (b) fluoranthene	1.56		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Benzo (g,h,i) perylene	0.412		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Benzo (k) fluoranthene	1.56		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Chrysenc	2.94		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Dibenz (a,h) anthracene	0.179		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Fluoranthene	8.61		mg/kg dry	0.770	5	08/14/09 15:11	SW846 8270D	9081287
Fluorene	ND		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	0.450		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Naphthalene	20.3		mg/kg dry	0.770	5	08/14/09 15:11	SW846 8270D	9081287
Phenanthrene	ND		mg/kg dry	0.154	1	08/13/09 23:26	SW846 8270D	9081287
Pyrene	10.8		mg/kg dry	0.770	5	08/14/09 15:11	SW846 8270D	9081287
1-Methylnaphthalene	48.6		mg/kg dry	3.08	20	08/15/09 21:56	SW846 8270D	9081287
2-Methylnaphthalene	74.5		mg/kg dry	3.08	20	08/15/09 21:56	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	107 %					08/13/09 23:26	SW846 8270D	9081287
Surr: 2-Fluorobiphenyl (14-120%)	61 %					08/13/09 23:26	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	36 %					08/13/09 23:26	SW846 8270D	9081287





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

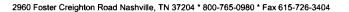
Laurel Bay Housing Project

Project Number: [none]

Received:

07/31/09 08:15

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSG2788-08 (1422 Alb	oatross - Soil)	Sampled:	07/30/09 13:45					
General Chemistry Parameters								
% Dry Solids	77.6		%	0.500	1	08/12/09 13:02	SW-846	9081656
Selected Volatile Organic Compounds	by EPA Metho	d 8260B						
Benzene	ND	RL1	mg/kg dry	0.107	50	08/10/09 17:37	SW846 8260B	9080198
Ethylbenzene	ND	RL1	mg/kg dry	0.107	50	08/10/09 17:37	SW846 8260B	9080198
Naphthalene	2.62		mg/kg dry	0.268	50	08/10/09 17:37	SW846 8260B	9080198
Toluene	ND	RL1	mg/kg dry	0.107	50	08/10/09 17:37	SW846 8260B	9080198
Xylenes, total	ND	RL1	mg/kg dry	0.268	50	08/10/09 17:37	SW846 8260B	9080198
Surr: 1,2-Dichloroethane-d4 (67-138%)	96 %					08/10/09 17:37	SW846 8260B	9080198
Surr: Dibromofluoromethane (75-125%)	96 %					08/10/09 17:37	SW846 8260B	9080198
Surr: Toluene-d8 (76-129%)	101 %					08/10/09 17:37	SW846 8260B	9080198
Surr: 4-Bromofluorobenzene (67-147%)	109 %					08/10/09 17:37	SW846 8260B	9080198
Polyaromatic Hydrocarbons by EPA 82	270D							
Acenaphthene	1.02		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Acenaphthylene	ND		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Anthracene	2.32		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Benzo (a) anthracene	9.75		mg/kg dry	0.425	5	08/15/09 21:11	SW846 8270D	9081287
Benzo (a) pyrene	3.23		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Benzo (b) fluoranthene	4.11		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Benzo (g,h,i) perylene	0.856		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Benzo (k) fluoranthene	3.55		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Chrysene	6.65		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Dibenz (a,h) anthracene	0.600		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Fluoranthene	36.3		mg/kg dry	1.70	20	08/15/09 22:19	SW846 8270D	9081287
Fluorene	2.19		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Indeno (1,2,3-cd) pyrene	1.03		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Naphthalene	1.62		mg/kg dry	0.0851	1	08/13/09 23:48	SW846 8270D	9081287
Phenanthrene	19.9		mg/kg dry	0.425	5	08/15/09 21:11	SW846 8270D	9081287
Pyrene	24.8		mg/kg dry	1.70	20	08/15/09 22:19	SW846 8270D	9081287
1-Methylnaphthalene	6.84		mg/kg dry	0.425	5	08/15/09 21:11	SW846 8270D	9081287
2-Methylnaphthalene	9.39		mg/kg dry	0.425	5	08/15/09 21:11	SW846 8270D	9081287
Surr: Terphenyl-d14 (18-120%)	81 %		·			08/13/09 23:48	SW846 8270D	9081287
Surr: 2-Fluorobiphenyl (14-120%)	81 %					08/13/09 23:48	SW846 8270D	9081287
Surr: Nitrobenzene-d5 (17-120%)	80 %					08/13/09 23:48	SW846 8270D	9081287





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Client

Attn

Work Order:

NSG2788

Project Name:

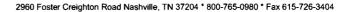
Laurel Bay Housing Project

[none] Project Number: Received:

07/31/09 08:15

#### SAMPLE EXTRACTION DATA

	P. J.	r I N I	Wt/Vol Extracted	Extracted Vol	Date		Extraction Method
Parameter	Batch	Lab Number	Extracted	Extracted Voi	Date	Analyst	Method
Polyaromatic Hydrocarbons by E							
SW846 8270D	9081287	NSG2788-01	30.00	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-02	30.46	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-02RE1	30.46	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-02RE2	30.46	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-03	30.57	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-03RE1	30.57	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-03RE2	30.57	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-04	30.52	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-04RE1	30.52	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-05	30.73	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-05RE1	30.73	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-06	30.13	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-07	30.24	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-07RE1	30.24	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-07RE2	30.24	2.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-08	30.44	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-08RE1	30.44	1.00	08/08/09 14:37	AJF	EPA 3550C
SW846 8270D	9081287	NSG2788-08RE2	30.44	1.00	08/08/09 14:37	AJF	EPA 3550C
Selected Volatile Organic Compo	ounds by EPA Method 8	3260B					
SW846 8260B	9080050	NSG2788-01	5.26	5.00	07/29/09 09:50	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-02	5.78	5.00	07/29/09 09:45	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-02RE1	5.45	5.00	07/29/09 09:45	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-03	5.32	5.00	07/29/09 14:10	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-03RE1	5.26	5.00	07/29/09 14:10	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-03RE2	5.26	5.00	07/29/09 14:10	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-04	4.94	5.00	07/29/09 14:25	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-04RE1	5.11	5.00	07/29/09 14:25	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-04RE2	5.11	5.00	07/29/09 14:25	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-05	5.91	5.00	07/30/09 09:45	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-05RE1	6.21	5.00	07/30/09 09:45	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-05RE2	5.83	5.00	07/30/09 09:45	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-06	6.03	5.00	07/30/09 10:15	CHH	EPA 5035
SW846 8260B	9080198	NSG2788-06RE1	5.50	5.00	07/30/09 10:15	СНН	EPA 5035
SW846 8260B	9081549	NSG2788-06RE2	5.50	5.00	07/30/09 10:15	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-07	5.12	5.00	07/30/09 14:15	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-07RE1	4.74	5.00	07/30/09 14:15	СНН	EPA 5035
SW846 8260B	9080050	NSG2788-08	6.57	5.00	07/30/09 13:45	СНН	EPA 5035
SW846 8260B	9080198	NSG2788-08RE1	6.00	5.00	07/30/09 13:45	СНН	EPA 5035





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Client

Attn

Work Order:

NSG2788

Project Name:

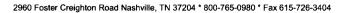
Laurel Bay Housing Project

Project Number: [none]

Received: 07/31/09 08:15

#### PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Selected Volatile Organic Comp	ounds by EPA Method	8260B				
9080050-BLK1	-					
Benzene	< 0.000670		mg/kg wet	9080050	9080050-BLK1	08/09/09 14:33
Ethylbenzene	< 0.000670		mg/kg wet	9080050	9080050-BLK1	08/09/09 14:33
Naphthalene	< 0.00170		mg/kg wet	9080050	9080050-BLK1	08/09/09 14:33
Toluene	< 0.000400		mg/kg wet	9080050	9080050-BLK1	08/09/09 14:33
Xylenes, total	< 0.00130		mg/kg wet	9080050	9080050-BLK1	08/09/09 14:33
Surrogate: 1,2-Dichloroethane-d4	100%			9080050	9080050-BLK1	08/09/09 14:33
Surrogate: Dibromofluoromethane	101%			9080050	9080050-BLK1	08/09/09 14:33
Surrogate: Toluene-d8	100%			9080050	9080050-BLK1	08/09/09 14:33
Surrogate: 4-Bromofluorobenzene	99%			9080050	9080050-BLK1	08/09/09 14:33
9080198-BLK1						
Benzene	< 0.000670		mg/kg wet	9080198	9080198-BLK1	08/10/09 12:26
Ethylbenzene	< 0.000670		mg/kg wet	9080198	9080198-BLK1	08/10/09 12:26
Naphthalene	< 0.00170		mg/kg wet	9080198	9080198-BLK1	08/10/09 12:26
Toluene	< 0.000400		mg/kg wet	9080198	9080198-BLK1	08/10/09 12:26
Xylenes, total	< 0.00130		mg/kg wet	9080198	9080198-BLK1	08/10/09 12:26
Surrogate: 1,2-Dichloroethane-d4	106%			9080198	9080198-BLK1	08/10/09 12:26
Surrogate: Dibromofluoromethane	98%			9080198	9080198-BLK1	08/10/09 12:26
Surrogate: Toluene-d8	97%			9080198	9080198-BLK1	08/10/09 12:26
Surrogate: 4-Bromofluorobenzene	99%			9080198	9080198-BLK1	08/10/09 12:26
9081549-BLK1						
Benzene	< 0.000670		mg/kg wet	9081549	9081549-BLK1	08/11/09 12:56
Ethylbenzene	< 0.000670		mg/kg wet	9081549	9081549-BLK1	08/11/09 12:56
Naphthalene	< 0.00170		mg/kg wet	9081549	9081549-BLK1	08/11/09 12:56
Toluene	< 0.000400		mg/kg wet	9081549	9081549-BLK1	08/11/09 12:56
Xylenes, total	< 0.00130		mg/kg wet	9081549	9081549-BLK1	08/11/09 12:56
Surrogate: 1,2-Dichloroethane-d4	106%			9081549	9081549-BLK1	08/11/09 12:56
Surrogate: Dibromofluoromethane	103%			9081549	9081549-BLK1	08/11/09 12:56
Surrogate: Toluene-d8	102%			9081549	9081549-BLK1	08/11/09 12:56
Surrogate: 4-Bromofluorobenzene	99%			9081549	9081549-BLK1	08/11/09 12:56
Polyaromatic Hydrocarbons by	EPA 8270D					
9081287-BLK1						
Acenaphthene	< 0.0320		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Acenaphthylene	< 0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Anthracene	< 0.0330		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (a) anthracene	< 0.0380		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (a) pyrene	< 0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (b) fluoranthene	< 0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Benzo (g,h,i) perylene	< 0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46





10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NSG2788

Project Name:

Received:

Laurel Bay Housing Project

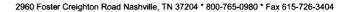
Project Number:

[none] 07/31/09 08:15

# PROJECT QUALITY CONTROL DATA

Blank - Cont.

nalyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
		V	Omis	Q.C. Batch	Lao (Admoci	
Polyaromatic Hydrocarbons	s by EPA 8270D					
081287-BLK1						
Benzo (k) fluoranthene	< 0.0300		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Chrysene	< 0.0400		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Dibenz (a,h) anthracene	< 0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
luoranthene	< 0.0340		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
luorene	< 0.0360		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
deno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
phthalene	< 0.0410		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
enanthrene	< 0.0340		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
rene	< 0.0410		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
Methylnaphthalene	< 0.0320		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
-Methylnaphthalene	< 0.0330		mg/kg wet	9081287	9081287-BLK1	08/13/09 17:46
rrogate: Terphenyl-d14	90%			9081287	9081287-BLK1	08/13/09 17:46
rrogate: 2-Fluorobiphenyl	81%			9081287	9081287-BLK1	08/13/09 17:46
rrogate: Nitrobenzene-d5	74%			9081287	9081287-BLK1	08/13/09 17:46





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number: [none]

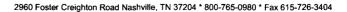
Received:

07/31/09 08:15

## PROJECT QUALITY CONTROL DATA

#### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
9081656-DUP1										00/44/00 44 04
% Dry Solids	89.6	89.2		%	0.4	20	9081656	NSG2786-04		08/12/09 13:02



NSG2788



EEG - Small Business Group, Inc. (2449) Client

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

Project Name:

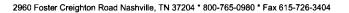
Laurel Bay Housing Project

[none] Project Number: Received:

07/31/09 08:15

### PROJECT QUALITY CONTROL DATA **LCS**

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compound	ls by EPA Method 82	60B						
9080050-BS1	·							
Benzene	50.0	46.0	MNRI	ug/kg	92%	78 - 126	9080050	08/09/09 13:01
Ethylbenzene	50.0	47.7	MNR1	ug/kg	95%	79 - 130	9080050	08/09/09 13:01
Naphthalene	50.0	48.3	MNR1	ug/kg	97%	72 - 150	9080050	08/09/09 13:01
Toluene	50.0	50.1	MNR1	ug/kg	100%	76 - 126	9080050	08/09/09 13:01
Xylenes, total	150	146	MNR1	ug/kg	97%	80 - 130	9080050	08/09/09 13:01
Surrogate: 1,2-Dichloroethane-d4	50.0	52.6			105%	67 - 138	9080050	08/09/09 13:01
Surrogate: Dibromofluoromethane	50.0	49.4			99%	75 - 125	9080050	08/09/09 13:01
Surrogate: Toluene-d8	50.0	52.1			104%	76 - 129	9080050	08/09/09 13:01
Surrogate: 4-Bromofluorobenzene	50.0	49.2			98%	67 - 147	9080050	08/09/09 13:01
9080198-BS1								
Benzene	50.0	53.2		ug/kg	106%	78 - 126	9080198	08/10/09 10:54
Ethylbenzene	50.0	56.1		ug/kg	112%	79 - 130	9080198	08/10/09 10:54
Naphthalene	50.0	57.8		ug/kg	116%	72 - 150	9080198	08/10/09 10:54
Toluene	50.0	55.3		ug/kg	111%	76 - 126	9080198	08/10/09 10:54
Xylenes, total	150	174		ug/kg	116%	80 - 130	9080198	08/10/09 10:54
Surrogate: 1,2-Dichloroethane-d4	50.0	55.6			111%	67 - 138	9080198	08/10/09 10:54
Surrogate: Dibromofluoromethane	50.0	50.2			100%	75 - 125	9080198	08/10/09 10:54
Surrogate: Toluene-d8	50.0	48.5			97%	76 - 129	9080198	08/10/09 10:54
Surrogate: 4-Bromofluorobenzene	50.0	49.2			98%	67 - 147	9080198	08/10/09 10:54
9081549-BS1								
Benzene	50.0	50.1		ug/kg	100%	78 - 126	9081549	08/11/09 11:53
Ethylbenzene	50.0	52.9		ug/kg	106%	79 - 130	9081549	08/11/09 11:53
Naphthalene	50.0	55.4		ug/kg	111%	72 - 150	9081549	08/11/09 11:53
Toluene	50.0	54.7		ug/kg	109%	76 - 126	9081549	08/11/09 11:53
Xylenes, total	150	163		ug/kg	109%	80 - 130	9081549	08/11/09 11:53
Surrogate: 1,2-Dichloroethane-d4	50.0	56.0			112%	67 - 138	9081549	08/11/09 11:53
Surrogate: Dibromofluoromethane	50.0	50.0			100%	75 - 125	9081549	08/11/09 11:53
Surrogate: Toluene-d8	50.0	52.3			105%	76 - 129	9081549	08/11/09 11:53
Surrogate: 4-Bromofluorobenzene	50.0	50.4			101%	67 - 147	9081549	08/11/09 11:53
Polyaromatic Hydrocarbons by EPA	8270D							
9081287-BS1								
Acenaphthene	1.67	1.36	MNR1	mg/kg wet	82%	49 - 120	9081287	08/13/09 18:08
Acenaphthylene	1.67	1.47	MNR1	mg/kg wet	88%	52 - 120	9081287	08/13/09 18:08
Anthracene	1.67	1.63	MNR1	mg/kg wet	98%	58 - 120	9081287	08/13/09 18:08
Benzo (a) anthracene	1.67	1.46	MNR1	mg/kg wet	87%	57 - 120	9081287	08/13/09 18:08
Benzo (a) pyrene	1.67	1.54	MNR	mg/kg wet	92%	55 - 120	9081287	08/13/09 18:08
Benzo (b) fluoranthene	1.67	1.37	MNR1	mg/kg wet	82%	51 - 123	9081287	08/13/09 18:08
Benzo (g,h,i) perylene	1.67	1.52	MNR1	mg/kg wet	91%	49 - 121	9081287	08/13/09 18:08





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Received:

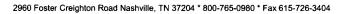
Laurel Bay Housing Project

Project Number: [none]

07/31/09 08:15

# PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EP.	A 8270D							
9081287-BS1								
Benzo (k) fluoranthene	1.67	1.48	MNRI	mg/kg wet	89%	42 - 129	9081287	08/13/09 18:08
Chrysene	1.67	1.39	MNR1	mg/kg wet	84%	55 - 120	9081287	08/13/09 18:08
Dibenz (a,h) anthracene	1.67	1.50	MNR1	mg/kg wet	90%	50 - 123	9081287	08/13/09 18:08
Fluoranthene	1.67	1.49	MNR1	mg/kg wet	89%	58 - 120	9081287	08/13/09 18:08
Fluorene	1.67	1.40	MNR1	mg/kg wet	84%	54 - 120	9081287	08/13/09 18:08
Indeno (1,2,3-cd) pyrene	1.67	1.53	MNR1	mg/kg wet	92%	50 - 122	9081287	08/13/09 18:08
Naphthalene	1.67	1.12	MNR1	mg/kg wet	67%	28 - 120	9081287	08/13/09 18:08
Phenanthrene	1.67	1.43	MNR1	mg/kg wet	86%	56 - 120	9081287	08/13/09 18:08
Pyrene	1.67	1.46	MNR1	mg/kg wet	87%	56 - 120	9081287	08/13/09 18:08
1-Methylnaphthalene	1.67	1.10	MNRI	mg/kg wet	66%	36 - 120	9081287	08/13/09 18:08
2-Methylnaphthalene	1.67	1.15	MNR1	mg/kg wet	69%	36 - 120	9081287	08/13/09 18:08
Surrogate: Terphenyl-d14	1.67	1.28			77%	18 - 120	9081287	08/13/09 18:08
Surrogate: 2-Fluorobiphenyl	1.67	1.20			72%	14 - 120	9081287	08/13/09 18:08
Surrogate: Nitrobenzene-d5	1.67	1.03			62%	17 - 120	9081287	08/13/09 18:08





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

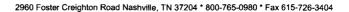
Project Name:

Laurel Bay Housing Project

Project Number: Received: [none] 07/31/09 08:15

# 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 Compound	s by EPA	Method 826	60B									
9080050-BSD1												
Benzene		53.8		ug/kg	50.0	108%	78 - 126	16	50	9080050		08/09/09 13:31
Ethylbenzene		56.0		ug/kg	50.0	112%	79 - 130	16	50	9080050		08/09/09 13:31
Naphthalene		56.9		ug/kg	50.0	114%	72 - 150	16	50	9080050		08/09/09 13:31
Toluene		55.4		ug/kg	50.0	111%	76 - 126	10	50	9080050		08/09/09 13:31
Xylenes, total		169		ug/kg	150	113%	80 - 130	15	50	9080050		08/09/09 13:31
Surrogate: 1,2-Dichloroethane-d4		52.9		ug/kg	50.0	106%	67 - 138			9080050		08/09/09 13:31
Surrogate: Dibromofluoromethane		50.2		ug/kg	50.0	100%	75 - 125			9080050		08/09/09 13:31
Surrogate: Toluene-d8		50.3		ug/kg	50.0	101%	76 - 129			9080050		08/09/09 13:31
Surrogate: 4-Bromofluorobenzene		48.5		ug/kg	50.0	97%	67 - 147			9080050		08/09/09 13:31
9080198-BSD1												
Benzene		49.8		ug/kg	50.0	100%	78 - 126	7	50	9080198		08/10/09 11:25
Ethylbenzene		49.8		ug/kg	50.0	100%	79 - 130	12	50	9080198		08/10/09 11:25
Naphthalene		53.1		ug/kg	50.0	106%	72 - 150	8	50	9080198		08/10/09 11:25
Toluene		48.7		ug/kg	50.0	97%	76 - 126	13	50	9080198		08/10/09 11:25
Xylenes, total		154		ug/kg	150	103%	80 - 130	12	50	9080198		08/10/09 11:25
Surrogate: 1,2-Dichloroethane-d4		58.9		ug/kg	50.0	118%	67 - 138			9080198		08/10/09 11:25
Surrogate: Dibromofluoromethane		54.4		ug/kg	50.0	109%	75 - 125			9080198		08/10/09 11:25
Surrogate: Toluene-d8		48.1		ug/kg	50.0	96%	76 - 129			9080198		08/10/09 11:25
Surrogate: 4-Bromofluorobenzene		49.3		ug/kg	50.0	99%	67 - 147			9080198		08/10/09 11:25





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number:

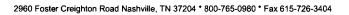
[none]

Received: 07/31/09 08:15

# PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q Unit	s Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compo	unds by EPA Me	thod 8260B							
9080198-MS1									
Benzene	ND	2.26	mg/kg	wet 2.39	94%	42 - 141	9080198	NSH0064-04	08/10/09 20:23
Ethylbenzene	ND	2.39	mg/kg	vet 2.39	100%	21 - 165	9080198	NSH0064-04	08/10/09 20:23
Naphthalene	0.174	2.17	mg/kg	vet 2.39	83%	10 - 160	9080198	NSH0064-04	08/10/09 20:23
Toluene	ND	2.46	mg/kg	vet 2.39	103%	45 - 145	9080198	NSH0064-04	08/10/09 20:23
Xylenes, total	ND	7.26	mg/kg	wet 7.18	101%	31 - 159	9080198	NSH0064-04	08/10/09 20:23
Surrogate: 1,2-Dichloroethane-d4		51.3	ug/kį	50.0	103%	67 - 138	9080198	NSH0064-04	08/10/09 20:23
Surrogate: Dibromofluoromethane		49.3	ug/kį	50.0	99%	75 - 125	9080198	NSH0064-04	08/10/09 20:23
Surrogate: Toluene-d8		61.2	ug/kg	50.0	122%	76 - 129	9080198	NSH0064-04	08/10/09 20:23
Surrogate: 4-Bromofluorobenzene		58.4	ug/kį	50.0	117%	67 - 147	9080198	NSH0064-04	08/10/09 20:23
9081549-MS1									
Benzene	ND	6.27	mg/kg	dry 6.41	98%	42 - 141	9081549	NSG2788-06RE 2	08/11/09 20:57
Ethylbenzene	0.812	7.77	mg/kg	dry 6.41	108%	21 - 165	9081549	NSG2788-06RE 2	08/11/09 20:57
Naphthalene	15.8	22.6	mg/kg	dry 6.41	107%	10 - 160	9081549	NSG2788-06RE 2	08/11/09 20:57
Toluene	0.205	6.91	mg/kg	dry 6.41	105%	45 - 145	9081549	NSG2788-06RE 2	08/11/09 20:57
Xylenes, total	3.45	24.9	mg/kg	iry 19.2	111%	31 - 159	9081549	NSG2788-06RE 2	08/11/09 20:57
Surrogate: 1,2-Dichloroethane-d4		51.5	ug/kį	50.0	103%	67 - 138	9081549	NSG2788-06RE 2	08/11/09 20:57
Surrogate: Dibromofluoromethane		47.6	ug/kį	50.0	95%	75 - 125	9081549	NSG2788-06RE 2	08/11/09 20:57
Surrogate: Toluene-d8		50.6	ug/kg	50.0	101%	76 - 129	9081549	NSG2788-06RE 2	08/11/09 20:57
Surrogate: 4-Bromofluorobenzene		53.0	ug/kį	50.0	106%	67 - 147	9081549	NSG2788-06RE	08/11/09 20:57

2





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 07/31/09 08:15

# 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 Compou	nds by EPA	Method 826	50B									
9080198-MSD1												
Benzene	ND	2.36		mg/kg wet	2.39	99%	42 - 141	4	50	9080198	NSH0064-04	08/10/09 20:54
Ethylbenzene	ND	2.52		mg/kg wet	2.39	105%	21 - 165	5	50	9080198	NSH0064-04	08/10/09 20:54
Naphthalene	0.174	2.46		mg/kg wet	2.39	96%	10 - 160	13	50	9080198	NSH0064-04	08/10/09 20:54
Toluene	ND	2.57		mg/kg wet	2.39	107%	45 - 145	4	50	9080198	NSH0064-04	08/10/09 20:54
Xylenes, total	ND	7.61		mg/kg wet	7.18	106%	31 - 159	5	50	9080198	NSH0064-04	08/10/09 20:54
Surrogate: 1,2-Dichloroethane-d4		52.0		ug/kg	50.0	104%	67 - 138			9080198	NSH0064-04	08/10/09 20:54
Surrogate: Dibromofluoromethane		50.2		ug/kg	50.0	100%	75 - 125			9080198	NSH0064-04	08/10/09 20:54
Surrogate: Toluene-d8		59.7		ug/kg	50.0	119%	76 - 129			9080198	NSH0064-04	08/10/09 20:54
Surrogate: 4-Bromofluorobenzene		59.5		ug/kg	50.0	119%	67 - 147			9080198	NSH0064-04	08/10/09 20:54
9081549-MSD1												
Benzene	ND	6.20		mg/kg dry	6.41	97%	42 - 141	1	50	9081549	NSG2788-06RE 2	08/11/09 21:28
Ethylbenzene	0.812	7.71		mg/kg dry	6.41	108%	21 - 165	0.8	50	9081549	NSG2788-06RE 2	08/11/09 21:28
Naphthalene	15.8	22.1		mg/kg dry	6.41	98%	10 - 160	2	50	9081549	NSG2788-06RE 2	08/11/09 21:28
Toluene	0.205	6.45		mg/kg dry	6.41	97%	45 - 145	7	50	9081549	NSG2788-06RE 2	08/11/09 21:28
Xylenes, total	3.45	24.3		mg/kg dry	19.2	109%	31 - 159	2	50	9081549	NSG2788-06RE 2	08/11/09 21:28
Surrogate: 1,2-Dichloroethane-d4		49.5		ug/kg	50.0	99%	67 - 138			9081549	NSG2788-06RE 2	08/11/09 21:28
Surrogate: Dibromofluoromethane		46.6		ug/kg	50.0	93%	75 - 125			9081549	NSG2788-06RE 2	08/11/09 21:28
Surrogate: Toluene-d8		46.7		ug/kg	50.0	93%	76 - 129			9081549	NSG2788-06RE 2	08/11/09 21:28
Surrogate: 4-Bromofluorobenzene		53.2		ug/kg	50.0	106%	67 - 147			9081549	NSG2788-06RE 2	08/11/09 21:28



2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

07/31/09 08:15

#### **CERTIFICATION SUMMARY**

N/A

#### TestAmerica Nashville

Attn

 Method
 Matrix

 SW846 8260B
 Soil

 SW846 8270D
 Soil

 SW-846
 Soil

AIHA

Nelac

South Carolina

X X X X



THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client EEG - Small Business Group, Inc. (2449)

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

ZX

Work Order:

NSG2788

Project Name:

Laurel Bay Housing Project

Project Number: [1]
Received: 0

[none] 07/31/09 08:15

#### DATA QUALIFIERS AND DEFINITIONS

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

**RL1** Reporting limit raised due to sample matrix effects.

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

TestAmer	يارانويكا والواك	Nashville 2960 Fos Nashville	ter Cre	ighto	on .			To	oll Fr	ne: 6 ree: 8 ax: 6	00-7	65-09	80							meth		this wo	ng the pr ork being s?						
Client Name/Account #:	EEG # 2449															_							Complia	ance M	onitorin	g?	Yes	<del></del>	No.
Address:	10179 Highway	78														_							Enforc	cement	Action	?	Yes		No.
City/State/Zip:	Ladson, SC 29	456																Site	State:	sc									
Project Manager:	Tom McElwee	mail: mcelv	vee@ee	ginc.	net					<del> </del>									PO#:		08	23	<u> </u>						
Telephone Number:			<b>,</b>			. F	ax N	ی_ :.٥	<u> 57</u>	<u> 13 -</u>	<u>S</u>	77	_	0	40	2		TA Qu	ote #:										
Sampler Name: (Print)	PRAT	t sh	9u	2_												_		Proje	ect ID:	Laure	Bay I	lousing	Projec	<u> </u>				·	
Sampler Signature:	PI	1						$\sigma \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$			_	_						Pro	ect#:										
		<i></i>							rese	rvative		3			Matri	x						Α	nalyze	For:					
Sample ID / Description 1409 EAS/R 1406 EAS/R 1412 EAS/R 1413 EAS/R-1 1411 EAS/R-2 1413 Albatross 1414 Albatross 1422 Albatross	7/29/09 7/29/09 7/29/09 7/29/09 7/20/09 7/20/09 7/20/09	0950 0945 1410 1425 0945 1015 1415 1345	55555	TAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Composite	Field Filtered	<b>8</b> 2]	MAN DO DO NO NO (Blue Label) 7-3 SC	NaOH ( Orange Label)	H <sub>2</sub> SO, Plastic (Yellow Label)	TO CO DA LI D' None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	los X X X X X X X X X X X X X X X X X X X		WWWWWWBTEX + Napth - 82608	NOWN NOW PAH-8270C					NS	5-27	25	01 02 03 03 04 05 04 07 06		RUSH TAT (Pre-Schedule
											floor	$\Box$	$\Box$		$oldsymbol{\mathbb{I}}$	$oldsymbol{\mathbb{L}}$								<u> </u>				_	
Relinquished by Relinquished by:	7/30/ Date	09	Tim /90 Tim	0		F	y Tes	tAmeri	·/	pment	:			<del></del> .	Date		DEX	Time	, — — —   	Labo		eratur	e Upon of Head			4.			Y

# ATTACHMENT A

1 1 m

# **UST Certificate of Disposal**

# **CONTRACTOR**

Small Business Group, Inc. 10179 Highway 78 Ladson, SC 29456

TEL (843) 879-0403 FAX (843) 879-0401

# **TANK ID & LOCATION**

UST 1411Eagle-1, 1411 Eagle Lane, Laurel Bay Housing Area, MCAS Beaufort, S.C.

# **DISPOSAL LOCATION**

Coastal Auto Salvage Co., Inc. 130 Laurel Bay Road Beaufort, S.C. 29906

TYPE OF TANK	SIZE (GAL)
Steel	280

# **CLEANING/DISPOSAL METHOD**

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

# **DISPOSAL CERTIFICATION**

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

(Name) 8 26 09 (Date



**NON-HAZARDOUS MANIFEST** CWMMI (Form designed for use on elite (12-pitch) typewriter.) 2. Page of **NON-HAZARDOUS MANIFEST** A. Manifest Number 10885466 Generator's Name and Mailing Address
 CAS, Beaution

Generator's Phone 843 228-8460							1		
Transporter 1 Company Name	6. US EPA ID Nu	mber	1	C. State	Transp	orter's l	D		
EEG, Inc.	1111111	1111	1	D. Trans	porter's	Phone	84	3 879-	0411
Transporter 2 Company Name	8. US EPA ID Nu	mber		E. State	Transp	orter's I	D		
	111111	TITI	1	F. Trans	porter's	Phone	-		
Designated Facility Name and Site Address	10. US EPA ID Nu	mber		G. State	Facility	's ID		-	
						1			
HICKORY HILL LANDFILL				H. Facili	ty's Pho	ne			340
ROUTE 1, BOX 121	111111	1111	1		-		843	987-	4843
Description of Waste Materials		11	2. Cont	ainers		13	0.00		1.7
. Description of Practic materials			lo.	I Type	- 0	13. Total uantity		14. Unit Wt./Vol.	Misc. Commer
Heating Oil Tank filled with Sand	•	-					-		
1					7	24		TN	
WM Profile #	102655SC	0,0	11	1	1	1 1	1.	717	
		-+					-		7-2
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WM Profile #		1.	6			1 1			
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	4								
WM Profile #		-							
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WM Profile #	1 2 × 1	1	1		1	1.1	1		di i
	J 32 x 1	1	1	K. Dis	posal I	ocatio	n		
WM Profile #  Additional Descriptions for Materials Listed Above	1 12 1	1	1	K. Dis	posal I		n		all years
. Additional Descriptions for Materials Listed Above	J. 72 x 1		1		posal l		n	Leve	(A) (****
	1 12 x 1	1	1	K. Dis	posal l		n .	Leve	
. Additional Descriptions for Materials Listed Above		1	1	Cell	posal I	Locatio	n	Leve	
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation		2) 1711	2 6		posal I	ocatio	in .	Leve	
. Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information	ion) 1406 Engle 1	3) 140	3 6	Cell Grid	de	055	/	6/14	1261
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information	ion 1406 Engle /	3) 1413	J A	Cell Grid	ten	055	Y /	6)14	RIBARO
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Landfill Solidification  Bio Remediation  Landfill Solidification	2)411 EAS/2-21	3) 141	J PAN	Cell Grid	ten	055	Y /	6)14	RIBARO
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation	1406 Engle / 2) 1411 Engla - 2 × EMERGENCY CO	3) 14L 4) 1414 NTACT:	1 A A 5	Cell Grid	ten	055	Y /	6)14	1261
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  A CLER USTS FROM  Purchase Order #	2)411 EAS/2-21	3) 14L 4) 1414 NTACT:	1 A A 5)	Cell Grid	ten	055	Y /	6)14	RIBARO
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  CRACUSTS  Purchase Order #  6. GENERATOR'S CERTIFICATION:	2) 1411 FASTA -27 EMERGENCY CO	NTACT:	2)	Grid 1 b q 1 b q	teo lon	055	55	6)14	Albarace 1231
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  CRA LISTS  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ	S 1411 E AS /2 - 2 Y EMERGENCY CO	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	PIDATED
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  For A 15 5 5  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a	EMERGENCY COL	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	Albahac 1231
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  For A LISTS  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a for transportation according to applica	Ded materials are not hazar and accurately described, on the able regulations.	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	Albahac /23 v t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  For A 15 5 5  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a	EMERGENCY COL	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	Albahac /23 v t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  CRA USIS  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describe applicable state law, have been fully a for transportation according to applica	Ded materials are not hazar and accurately described, on the able regulations.	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	Albahao 23 V t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a for transportation according to application  Printed/Typed Name  7. Transporter 1 Acknowledgement of Receipt of Material	ed materials are not hazar and accurately described, on the second signature of the second signature o	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	Albahao 23 V t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a for transportation according to application  Printed/Typed Name	ed materials are not hazar and accurately described, on the second signature of the second signature o	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a for transportation according to application  Printed/Typed Name  7. Transporter 1 Acknowledgement of Receipt of Material	Ded materials are not hazar and accurately described, on the able regulations.  Signature "On beauties."	dous wast	es a	Grid Grid Ib 4 A I	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	t 261 or any per condition
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describ applicable state law, have been fully a for transportation according to application  Printed/Typed Name  7. Transporter 1 Acknowledgement of Receipt of Material Printed/Typed Name	ed materials are not hazar and accurately described, of able regulations.  Signature "On be Signature of the	dous wast	es a	Grid Grid A 1	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	t 261 or any per condition  Month Day  Month Day
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describe applicable state law, have been fully a for transportation according to applicate Printed/Typed Name  7. Transporter 1 Acknowledgement of Receipt of Material Printed/Typed Name	ed materials are not hazar and accurately described, of able regulations.  Signature "On be Signature of the	dous wast	es a	Grid Grid A 1	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	t 261 or any per condition  Month Day Month Day Month Day
Additional Descriptions for Materials Listed Above  Landfill Solidification  Bio Remediation  5. Special Handling Instructions and Additional Information  Purchase Order #  6. GENERATOR'S CERTIFICATION:  I hereby certify that the above-describe applicable state law, have been fully a for transportation according to applicate Printed/Typed Name  7. Transporter 1 Acknowledgement of Receipt of Material Printed/Typed Name  8. Transporter 2 Acknowledgement of Receipt of Material	Ded materials are not hazar and accurately described, of able regulations.  Signature "On beautiful and accurate the signature an	dous wast	es a	Grid Grid A 1	teo lon	055 5 5 1/20 0y 40	55 CF	6) 14 -/4 R Par	t 261 or any per condition  Month Day Y

was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20.	Facitilty Owner or Operator: Certification of receipt of non-		
	Printed/Typed Name	Signature	)00

Month		D	ay	Year			
0	0	1	3	P	7		

# Appendix C Laboratory Analytical Reports - Initial Groundwater



# **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB1411TW01WG20150619

Laboratory ID: QF20008-008

Matrix: Aqueous

78249

Date Sampled: 06/18/2015 1115

5030B

Date Received: 06/20/2015 Run Prep Method Analytical Method Dilution **Analysis Date Analyst Prep Date** Batch

8260B

	CAS	Analytical				
Parameter	Number	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	37	5.0	0.51	0.21 ug/L 1
Naphthalene	91-20-3	8260B	190	5.0	0.96	0.14 ug/L 1
Toluene	108-88-3	8260B	0.58 J	5.0	0.48	0.24 ug/L 1
Xylenes (total)	1330-20-7	8260B	68	5.0	0.57	0.19 ug/L 1

06/26/2015 2130 ALL

Surrogate	Run 1 Q % Recovery	Acceptance Limits
Bromofluorobenzene	99	75-120
1,2-Dichloroethane-d4	96	70-120
Toluene-d8	97	85-120
Dibromofluoromethane	99	85-115

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

S = MS/MSD failure

Shealy Environmental Services, Inc.

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1411TW01WG20150619

Laboratory ID: QF20008-008

Matrix: Aqueous

Date Sampled: 06/18/2015 1115 Date Received: 06/20/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date Batch
1	3520C	8270D (SIM)	1	06/23/2015 2015 RBH	06/22/2015 1610 77836

	CAS	Analytical					
Parameter	Number	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		112	15-139
Fluoranthene-d10		32	23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

N = Recovery is out of criteria L = LCS/LCSD failure

S = MS/MSD failure

Shealy Environmental Services, Inc.

# **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB1411TW02WG20150619

Laboratory ID: QF20008-010

Date Sampled: 06/18/2015 1235 Date Received: 06/20/2015

Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260B	1	06/26/2015 2215 ALL		78249

	CAS	Analytical					
Parameter	Number	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	1.5	J	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	0.19 ug/L 1

Surrogate		Run 1 Q % Recove	Acceptance ery Limits	
Bromofluorobe	nzene	91	75-120	
1,2-Dichloroeth	nane-d4	96	70-120	
Toluene-d8		95	85-120	
Dibromofluoror	nethane	99	85-115	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure N = Recovery is out of criteria L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

P = The RPD between two GC columns exceeds 40%

S = MS/MSD failure

Shealy Environmental Services, Inc.

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1411TW02WG20150619

Laboratory ID: QF20008-010

Matrix: Aqueous

Date Sampled: 06/18/2015 1235

Date Received: 06/20/2015

Run Prep Method **Analytical Method Dilution Analysis Date Analyst** Batch **Prep Date** 1 3520C 8270D (SIM) 06/23/2015 2116 RBH 06/22/2015 1610 77836

	CAS	Analytical				
Parameter	Number	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		76	15-139
Fluoranthene-d10		79	23-154

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

L = LCS/LCSD failure S = MS/MSD failure

Shealy Environmental Services, Inc.

# Appendix D Laboratory Analytical Report — Permanent Well Groundwater



# **Volatile Organic Compounds by GC/MS**

Client: AECOM - Resolution Consultants

Description: BEALB1411MW01WG20171211

Laboratory ID: SL12033-003

Matrix: Aqueous

Date Sampled:12/11/2017 1240	
Date Received: 12/12/2017	

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
2	5030B	8260B	1	12/19/2017 0247 BWS		60025

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L 2
Ethylbenzene	100-41-4	8260B	2.5		1.0	0.80	0.40	ug/L 2
Naphthalene	91-20-3	8260B	15		1.0	0.80	0.40	ug/L 2
Toluene	108-88-3	8260B	0.72	J	1.0	0.80	0.40	ug/L 2
Xylenes (total)	1330-20-7	8260B	9.6		1.0	0.80	0.40	ug/L 2

Surrogate	Run 2 A Q % Recovery	cceptance Limits	
Bromofluorobenzene	95	85-114	
Dibromofluoromethane	104	80-119	
1,2-Dichloroethane-d4	97	81-118	
Toluene-d8	103	89-112	

LOQ = Limit of Quantitation U = Not detected at or above the LOQ H = Out of holding time

N = Recovery is out of criteria W = Reported on wet weight basis

P =The RPD between two GC columns exceeds 40% LOD = Limit of Detection

DL = Detection Limit  $J = Estimated result < LOQ and \ge DL$  Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Shealy Environmental Services, Inc.

## Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SL12033-003

Description: BEALB1411MW01WG20171211

Date Sampled:12/11/2017 1240

Matrix: Aqueous

Date Received: 12/12/2017

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date Batch** 1

3520C 8270D 12/29/2017 1455 CMP2 12/15/2017 1035 59757

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L 1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L 1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L 1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L 1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	U	0.20	0.10	0.040	ug/L 1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Nitrobenzene-d5		65	44-120
2-Fluorobiphenyl		64	44-119
Terphenyl-d14		71	50-134

LOQ = Limit of Quantitation U = Not detected at or above the LOQ H = Out of holding time

B = Detected in the method blank N = Recovery is out of criteria W = Reported on wet weight basis E = Quantitation of compound exceeded the calibration range P =The RPD between two GC columns exceeds 40% LOD = Limit of Detection

DL = Detection Limit  $J = Estimated result < LOQ and \ge DL$  Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Shealy Environmental Services, Inc.

# Appendix E Laboratory Analytical Report - Vapor



### **ALS ENVIRONMENTAL**

#### RESULTS OF ANALYSIS

Page 1 of 1

Client:AECOMALS Project ID: P1503199Client Sample ID:BEALB 1411 SG01 GS20150729ALS Sample ID: P1503199-010

Client Project ID: WE56-Laurel Bay Military Housing Area, MCAS Beaufort / 60342031.FI.WI

Test Code: EPA TO-15 Date Collected: 7/29/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 8/5/15
Analyst: Simon Cao Date Analyzed: 8/13/15

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: SC00447

Initial Pressure (psig): -2.32 Final Pressure (psig): 4.41

Canister Dilution Factor: 1.54

CAS#	Compound	Result μg/m³	LOQ μg/m³	LOD μg/m³	$\frac{MDL}{\mu g/m^3}$	Data Qualifier
71-43-2	Benzene	0.49	0.77	0.69	0.25	J
108-88-3	Toluene	14	0.77	0.68	0.26	
100-41-4	Ethylbenzene	5.7	0.77	0.68	0.25	
179601-23-1	m,p-Xylenes	28	1.5	1.3	0.46	
95-47-6	o-Xylene	7.7	0.77	0.65	0.23	
91-20-3	Naphthalene	0.97	0.77	0.68	0.28	

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 F Regulatory Correspondence





May 15, 2014

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)

Craig Ehde (via email)



PROMOTE PROTECT PROSPER
Catherine B. Templeton, Director

Attachment to:

Krieg to Drawdy Subject: IGWA

Dated 5/15/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks)

137 Laurel Bay Tank 2	387 Acorn
139 Laurel Bay	392 Acorn Tank 2
229 Cypress Tank 2	396 Acorn Tank 1
261 Beech Tank 1 •	396 Acorn Tank 2
261 Beech Tank 3	430 Elderberry
273 Birch Tank 1	433 Elderberry
273 Birch Tank 2	439 Elderberry
273 Birch Tank 3	440 Elderberry
276 Birch Tank 2	442 Elderberry
278 Birch Tank 2	443 Elderberry
291 Birch Tank 2	444 Elderberry Tank 1
300 Ash	445 Elderberry
304 Ash *	446 Elderberry
314 Ash Tank 1	448 Elderberry
314 Ash Tank 2	449 Elderberry
322 Ash Tank 2 *	451 Elderberry
323 Ash	453 Elderberry
324 Ash *	456 Elderberry Tank 1
325 Ash Tank 1 *	456 Elderberry Tank 2
325 Ash Tank 2	458 Elderberry Tank 1
326 Ash *	458 Elderberry Tank 3
336 Ash	464 Dogwood
339 Ash	466 Dogwood
343 Ash Tank 1 *	467 Dogwood
344 Ash Tank 1	468 Dogwood
348 Ash *	469 Dogwood
349 Ash Tank 1	471 Dogwood Tank 2
353 Ash Tank 1 *	471 Dogwood Tank 3
362 Aspen *	475 Dogwood Tank 1
376 Aspen *	475 Dogwood Tank 2
380 Aspen	516 Laurel Bay Tank 1 (UST#03747)
383 Aspen Tank 2 <sup>4</sup>	518 Laurel Bay

# Laurel Bay Underground Storage Tank Assessment Reports for: (121 addresses/139 tanks) cont.

531 Laurel Bay	1219 Cardinal	
532 Laurel Bay	1272 Albatross	
635 Dahlia Tank 2	1305 Eagle	
638 Dahlia	1353 Cardinal	
640 Dahlia Tank 1	1356 Cardinal	
640 Dahlia Tank 2	1357 Cardinal	
645 Dahlia	1359 Cardinal	
647 Dahlia	1360 Cardinal	
648 Dahlia Tank 2	1361 Cardinal	
650 Dahlia Tank 1	1368 Cardinal	
650 Dahlia Tank 2	1370 Cardinal Tank 1	
652 Dahlia Tank 1	1377 Dove	
652 Dahlia Tank 2	1381 Dove	
760 Althea	1382 Dove	
763 Althea	1384 Dove	
771 Althea	1385 Dove	
927 Albacore	1389 Dove	
1015 Foxglove	1391 Dove	
1046 Gardenia	1392 Dove	
1062 Gardenia Tank 2	1393 Dove Tank 1	
1070 Heather	1393 Dove Tank 2	
1072 Heather	1406 Eagle	
1102 Iris Tank 1	1407 Eagle Tank 1	
1107 Iris	1411 Eagle Tank 1	
1126 Iris	1411 Eagle Tank 2	
1129 Iris	1412 Eagle	
1132 Iris	1413 Albatross	
1133 Iris Tank 1	1414 Albatross	
1138 Iris	1422 Albatross	
1144 Iris Tank 1	1425 Albatross	
1144 Iris Tank 2	1426 Albatross	
1148 Iris Tank 1	1432 Dove	
1148 Iris Tank 2	1434 Dove	
1161 Jasmine	1436 Dove	
1167 Jasmine	1438 Dove Tank 1	
1170 Jasmine	1440 Dove	
1190 Bobwhite	1442 Dove Tank 1	
1192 Bobwhite		



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

Division of Waste Management Bureau of Land and Waste Management

February 22, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-May and June 2015

Laurel Bay Military Housing Area Multiple Properties

Dated October 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 52 stated addresses. For the remaining 91 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

MRX

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-May and June 2015

Specific Property Recommendations

Dated February 22, 2016

# **Draft Final Initial Groundwater Investigation Report for (143 addresses)**

Permanent Monito	oring Well Investigation recommendation (52 addresses)
273 Birch Drive	1192 Bobwhite Drive
325 Ash Street	1194 Bobwhite Drive
326 Ash Street	1272 Albatross Drive
336 Ash Street	1352 Cardinal Lane
343 Ash Street	1356 Cardinal Lane
353 Ash Street	1359 Cardinal Lane
430 Elderberry Drive	1360 Cardinal Lane
440 Elderberry Drive	1362 Cardinal Lane
456 Elderberry Drive	1370 Cardinal Lane
458 Elderberry Drive	1382 Dove Lane
468 Dogwood Drive	1384 Dove lane
518 Laurel Bay Blvd	1385 Dove Lane
635 Dahlia Drive	1389 Dove Lane
638 Dahlia Drive	1392 Dove Lane
640 Dahlia Drive	1393 Dove Lane
647 Dahlia Drive	1407 Eagle Lane
648 Dahlia Drive	1411 Eagle Lane
650 Dahlia Drive	1418 Albatross Drive
652 Dahlia Drive	1420 Albatross Drive
760 Althea Street	1426 Albatross Drive
1102 Iris Lane	1429 Albatross Drive
1132 Iris Lane	1434 Dove Lane
1133 Iris Lane	1436 Dove Lane
1144 Iris Lane	1440 Dove Lane
1148 Iris Lane	1442 Dove Lane
1186 Bobwhite Drive	1444 Dove Lane
No Furt	her Action recommendation (91 addresses):
137 Laurel Bay Blvd	771 Althea Street
139 Laurel Bay Blvd	927 Albacore Street
229 Cypress Street	1015 Foxglove Street
261 Beech Street	1046 Gardenia Drive
276 Birch Drive	1062 Gardenia Drive
278 Birch Drive	1070 Heather Street
291 Birch Drive	1072 Heather Street

300 Ash Street	1107 Iris Lane
304 Ash Street	1126 Iris Lane
314 Ash Street	1129 Iris Lane
322 Ash Street	1138 Iris Lane
323 Ash Street	1161 Jasmine Street
324 Ash Street	1167 Jasmine Street
339 Ash Street	1170 Jasmine Street
344 Ash Street	1190 Bobwhite Drive
348 Ash Street	1219 Cardinal Lane
349 Ash Street	1305 Eagle Lane
362 Aspen Street	1353 Cardinal Lane
376 Aspen Street	1354 Cardinal Lane
380 Aspen Street	1357 Cardinal Lane
383 Aspen Street	1361 Cardinal Lane
387 Acorn Drive	1364 Cardinal Lane
392 Acorn Drive	1368 Cardinal Lane
396 Acorn Drive	1377 Dove Lane
433 Elderberry Drive	1381 Dove Lane
439 Elderberry Drive	1391 Dove Lane
442 Elderberry Drive	1403 Eagle Lane
443 Elderberry Drive	1404 Eagle Lane
444 Elderberry Drive	1405 Eagle Lane
445 Elderberry Drive	1406 Eagle Lane
446 Elderberry Drive	1408 Eagle Lane
448 Elderberry Drive	1410 Eagle Lane
449 Elderberry Drive	1412 Eagle Lane
451 Elderberry Drive	1413 Albatross Drive
453 Elderberry Drive	1414 Albatross Drive
464 Dogwood Drive	1417 Albatross Drive
466 Dogwood Drive	1421 Albatross Drive
467 Dogwood Drive	1422 Albatross Drive
469 Dogwood Drive	1425 Albatross Drive
471 Dogwood Drive	1427 Albatross Drive
475 Dogwood Drive	1430 Dove Lane
516 Laurel Bay Blvd	1432 Dove Lane
531 Laurel Bay Blvd	1438 Dove Lane
532 Laurel Bay Blvd	1453 Cardinal Lane
645 Dahlia Drive	1455 Cardinal Lane
763 Althea Street	

Attachment to: Petrus to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report-May and June 2015
Specific Property Recommendations
Dated February 22, 2016, Page 2



June 18, 2018

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

RE: Approved

Draft Groundwater Assessment Report November and December 2017

Laurel Bay Military Housing Area

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received the above referenced report on April 4, 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 report and based on this review, DHEC has not generated any comments. DHEC agrees with the recommendations in the report including the NFA recommendations shown on the list on the attached page. 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

Lal Part

Department of Defense Corrective Action Section

Cc:

**EQC Region 8** 

Shawn Dolan, Resolution Consultants

Bryan Beck, NAVFAC MIDLANT

#### Attachment

Approval Draft Final Groundwater Assessment Report November and December 2017 Laurel Bay Military Housing Area June 18, 2018

## The addresses approved for NFA are:

- 1186 Bobwhite Drive
- 1192 Bobwhite Drive
- 1194 Bobwhite Drive
- 1352 Cardinal Lane
- 1356 Cardinal Lane
- 1382 Dove Lane
- 1384 Dove Lane
- 1411 Eagle Lane
- 1418 Albatross Drive
- 1426 Albatross Drive
- 1434 Dove Lane
- 1436 Dove Lane
- 1440 Dove Lane
- 1442 Dove Lane
- 1444 Dove Lane



June 20, 2017

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 Draft Final Revision 1 Vapor Intrusion Report July 2015, January 2016 and May 2016, Laurel Bay Military Housing Area, Multiple Properties

RE: Approval Response to Comments and Draft Final Revision 1 Letter Report - Petroleum Vapor Intrusion Investigations - June 2016 and January 2017, Multiple Properties, 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 errata pages on May 24 and June 7, 2017. 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 errata pages. Based on this review, DHEC did not generate any additional comments. 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

ZIRES

Department of Defense Corrective Action Section

Cc:

Russell Berry, EQC Region 8

Shawn Dolan, Resolution Consultants Bryan Beck, NAVFAC MIDLANT