SUMMARY REPORT
587 WEST DOVE LANE (FORMERLY 1440 WEST DOVE 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



Naval Facilities Engineering Command Atlantic 9324 Virginia Avenue Norfolk, Virginia 23511-3095 SUMMARY REPORT
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CTO WE52

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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 RSL regional 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 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove Lane). The sampling activities at 587 West Dove Lane (Formerly 1440 West Dove 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 - 1440 West Dove 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

On August 4, 2009, a single 280 gallon heating oil UST was removed from the front grassed area, adjacent to the car port at 587 West Dove Lane (Formerly 1440 West Dove Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'2" bgs and a single soil sample was collected from that



depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

### 2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove 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 16, 2015, a temporary monitoring well was installed at 587 West Dove Lane (Formerly 1440 West Dove 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. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – 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 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. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71.H-I (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – 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 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove 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 November 29, 2017, a permanent monitoring well was installed at 587 West Dove Lane (Formerly 1440 West Dove 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 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 *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 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove 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, USEPA (United States Environmental Protection Agency) VISLs, calculated building concentrations, and USEPA regional screening levels (RSLs) for residential air are presented in Table 4. The screening levels used for evaluation were those



levels that were in effect at the time of reporting and review by SCDHEC. A copy of the laboratory analytical data report is included in Appendix E.

The soil gas results collected from 587 West Dove Lane (Formerly 1440 West Dove Lane) were above the USEPA VISLs. However, the building concentrations calculated for each COPC with an exceedance of its respective USEPA VISL from 587 West Dove Lane (Formerly 1440 West Dove Lane) were below the USEPA RSLs, 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 587 West Dove 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 587 West Dove Lane (Formerly 1440 West Dove 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 587 West Dove 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 1440 West Dove 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.



# Laboratory Analytical Results - Soil 587 West Dove Lane (Formerly 1440 West Dove Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort

Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 08/04/09
Volatile Organic Compounds Analyz	ed by EPA Method 8260B (mg/kg)	
Benzene	0.003	0.00351
Ethylbenzene	1.15	1.87
Naphthalene	0.036	12.2
Toluene	0.627	0.0156
Xylenes, Total	13.01	8.08
Semivolatile Organic Compounds A	nalyzed by EPA Method 8270D (mg/kg)	
Benzo(a)anthracene	0.66	0.0816
Benzo(b)fluoranthene	0.66	0.0599
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	0.128
Dibenz(a,h)anthracene	0.66	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).

# Laboratory Analytical Results - Groundwater 587 West Dove Lane (Formerly 1440 West Dove Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 06/16/15
<b>Volatile Organic Compounds Analyze</b>	d by EPA Method 8260B	(μg/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	11
Naphthalene	25	29.33	70
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	9.7
Semivolatile Organic Compounds And	alyzed by EPA Method 8	270D (μg/L)	
Benzo(a)anthracene	10	NA	0.21
Benzo(b)fluoranthene	10	NA	0.17
Benzo(k)fluoranthene	10	NA	0.072
Chrysene	10	NA	0.42
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 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 3.0 (SCDHEC, May 2015).

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1x10<sup>-6</sup>, 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.

# Laboratory Analytical Results - Permanent Well Groundwater 587 West Dove Lane (Formerly 1440 West Dove Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 12/07/17				
<b>Volatile Organic Compounds Analyze</b>	Volatile Organic Compounds Analyzed by EPA Method 8260B (μg/L)						
Benzene	5	16.24	ND				
Ethylbenzene	700	45.95	1.6				
Naphthalene	25	29.33	3.4				
Toluene	1000	105,445	ND				
Xylenes, Total	10,000	2,133	3.0				
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>&</sup>lt;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 1x10<sup>-6</sup>, 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.

# Laboratory Analytical Results - Vapor 587 West Dove Lane (Formerly 1440 West Dove Lane)

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

Constituent	USEPA VISL (1)	Soil Gas Results Sample Collected 07/29/15	USEPA RSL (2)	Calculated Building Concentrations <sup>(3)</sup>		
Volatile Organic Compounds Analyzed by USEPA Method TO-15 (μg/m³)						
Benzene	12	ND	NA	NA		
Toluene	17000	48	NA	NA		
Ethylbenzene	37	22	NA	NA		
m,p-Xylenes	350	96	NA	NA		
o-Xylene	350	30	NA	NA		
Naphthalene	2.8	7.2	0.083	0.00055		

#### Notes:

Bold font indicates the analyte was detected.

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

NA - not applicable

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

RSL - Regional Screening Level

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

USEPA - United States Environmental Protection Agency

VISL - Vapor Intrusion Screening Level

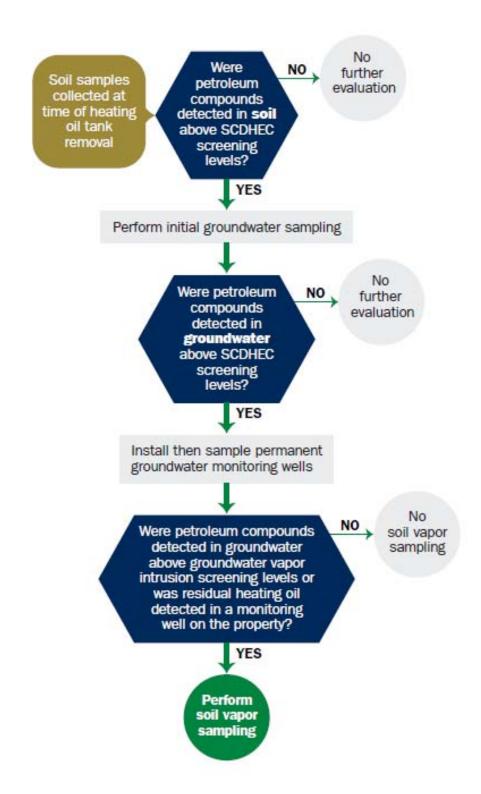
<sup>(1)</sup> United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (Version 3.4, June 2015). VISLs are based on a residual exposure scenario and a target risk level of 1x10-6 and a hazard quotient of 0.1.

<sup>(2)</sup> United States Environmental Protection Agency Regional Screening Levels for Residential Air from the USEPA RSL Table (June 2015), based on a target risk level of 1x10-6 for carcinogens, a target hazard quotient of 0.1 for noncarcinogens, and exposure duration of 26 years.

<sup>(3)</sup> Building concentrations are calculated using Johnson and Ettinger Soil Gas-Advanced Model for vapor intrusion into buildings (USEPA 2004).

# 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



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

NOV 1 3 2009

SC DHEC - Bureau of Land & Waste Management

# I. OWNERSHIP OF UST (S)

	ommanding Officer Attn: N. n, Individual, Public Agency, Other)	REAO (Craig Ehde)
P.O. Box 55001 Mailing Address		
	and the second second	
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
	Telephone Number	Contact Person

# II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #	Z-usyman Abis	A Company of	~	-			0.0
Laurel Bay Military	Housing Area,	Marine	Corps	Air	Station,	Beaufort,	SC
Facility Name or Company Site	dentifier						
1440 Dove Lane, Lau		ary Hous	ing Ar	rea	×		
Street Address or State Road (a	s applicable)						
Beaufort,	Beaufort						
City	County						

Attachment 2

# III. INSURANCE INFORMATION

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

VI. UST INFORMATION	1440Dove
Product(ex. Gas, Kerosene)	Heating oil
Capacity(ex. 1k, 2k)	280 gal
Age	Late 1950s
Construction Material(ex. Steel, FRP)	Steel
Month/Year of Last Use	Mid 1980s
Depth (ft.) To Base of Tank	6'2"
Spill Prevention Equipment Y/N	No
Overfill Prevention Equipment Y/N	No
Method of Closure Removed/Filled	Removed
Date Tanks Removed/Filled	8/4/09
Visible Corrosion or Pitting Y/N	Yes
Visible Holes Y/N	Yes
Method of disposal for any USTs removed from the <u>UST 1440Dove was removed from the</u> Subtitle "D" landfill. See Attachm	ground and disposed of at a
Method of disposal for any liquid petroleum, sludge disposal manifests)	s, or wastewaters removed from the USTs (atta
	Capacity(ex. 1k, 2k)

# VII. PIPING INFORMATION

		1440Dove				
		Steel				T
	Construction Material(ex. Steel, FRP)	& Copper				L
	Distance from UST to Dispenser	N/A				
	Number of Dispensers	N/A				
	Type of System Pressure or Suction	Suction				
,	Was Piping Removed from the Ground? Y/N	Yes				
	Visible Corrosion or Pitting Y/N	Yes				
	Visible Holes Y/N	No				
	Age	Late 1950s				
,	Corrosion and pitting were found			the s	teel v	eı
	pipe. Copper supply and return la	ines were sou	nd.			
	VIII RDIFF SITE DESCOI	DTION AND H	ISTOI	ov		
	VIII. BRIEF SITE DESCRI				steel	
	VIII. BRIEF SITE DESCRITE The USTs at the residences are contained formerly contained fuel oil formerly contained	nstructed of	single	e wall		
	The USTs at the residences are cor	nstructed of a	single nese (	e wall JSTs we	ere	
	The USTs at the residences are corand formerly contained fuel oil for	nstructed of a	single nese (	e wall JSTs we	ere	
	The USTs at the residences are corand formerly contained fuel oil for	nstructed of a	single nese (	e wall JSTs we	ere	
	The USTs at the residences are corand formerly contained fuel oil for	nstructed of a	single nese (	e wall JSTs we	ere	

# IX. SITE CONDITIONS

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

# X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1440Dove	Excav at fill end	Soil	Sandy	6 ' 2 "	8/4/09 0900 hrs	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.

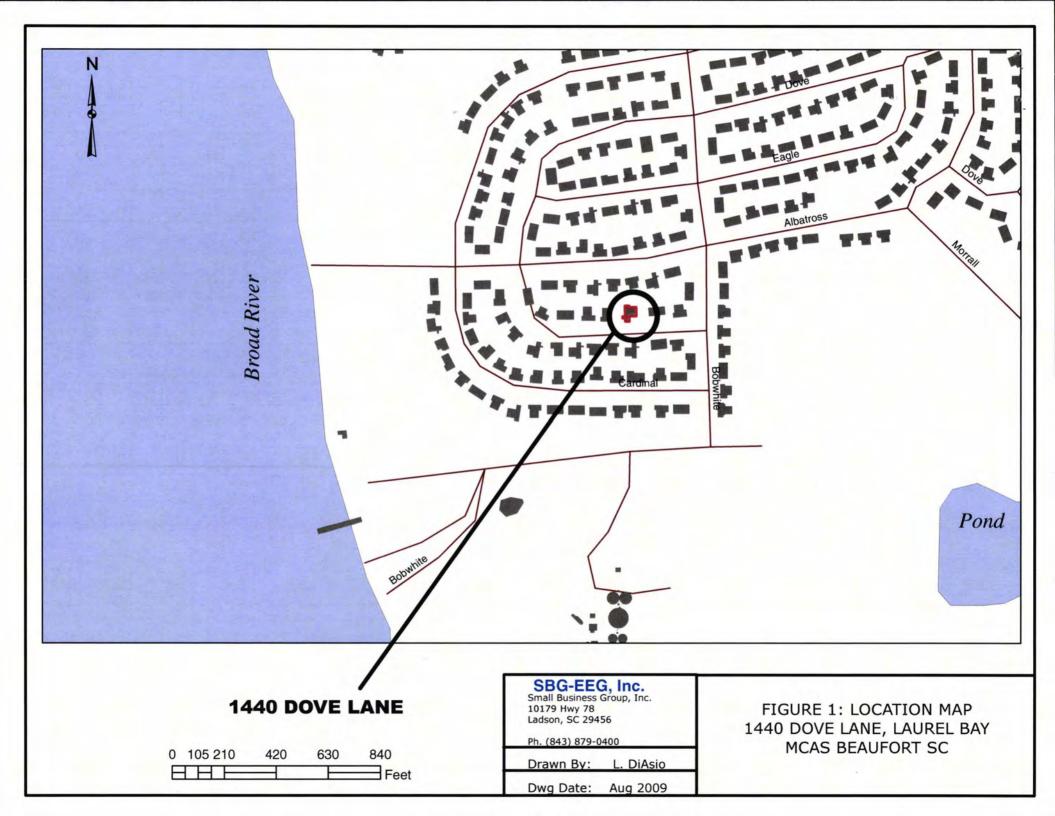
# XII. RECEPTORS

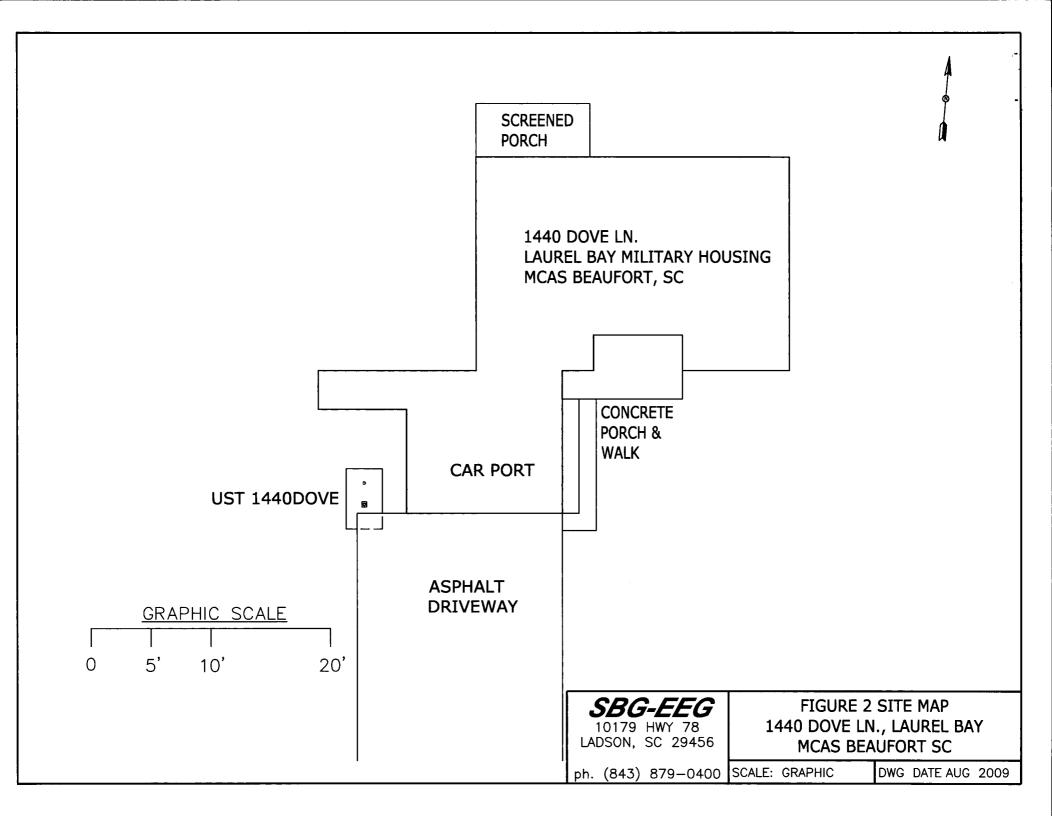
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate 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.		

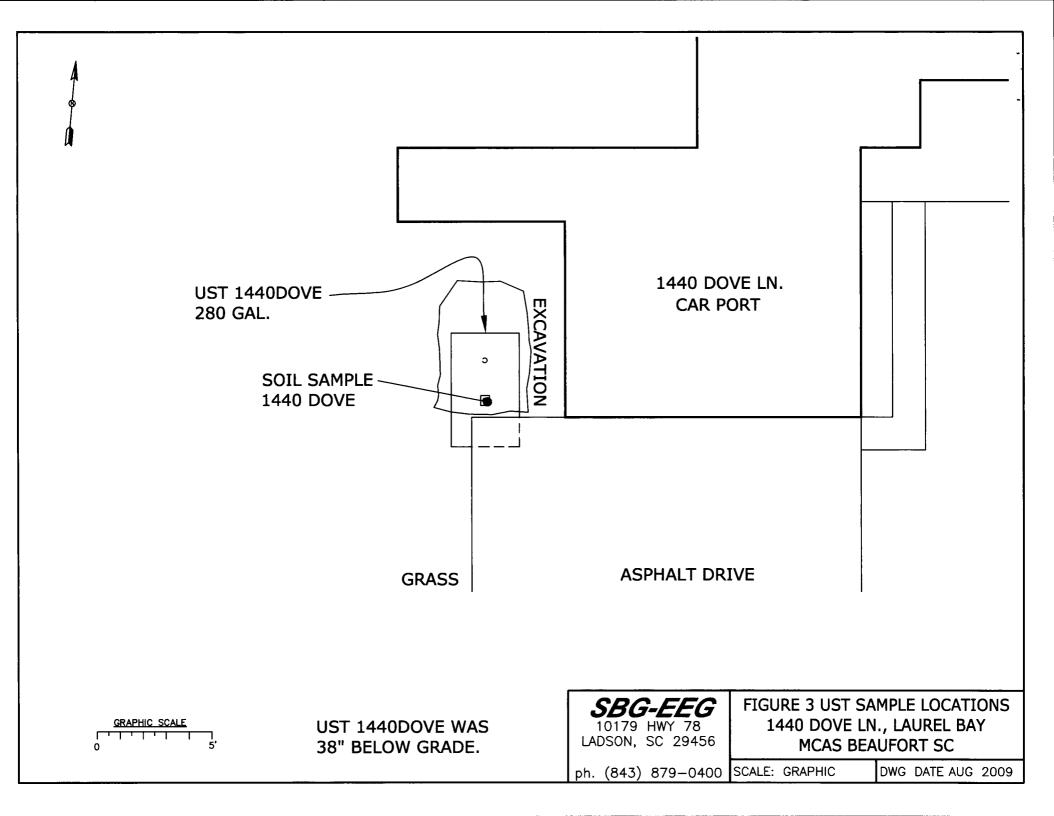
# XIII. SITE MAP

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: Location of UST 1440Dove.



Picture 2: UST 1440Dove.

# 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	1440Dove
Benzene	0.00351 mg/kg
Toluene	0.0156 mg/kg
Ethylbenzene	1.87 mg/kg
Xylenes	8.08 mg/kg
Naphthalene	12.2 mg/kg
Benzo (a) anthracene	0.0816 mg/kg
Benzo (b) fluoranthene	0.0599 mg/kg
Benzo (k) fluoranthene	ND
Chrysene	0.128 mg/kg
Dibenz (a, h) anthracene	ND
TPH (EPA 3550)	
CoC	
Benzene	
Toluene	
Ethylbenzene	
Xylenes	
Naphthalene	
Benzo (a) anthracene	
Benzo (b) fluoranthene	
Benzo (k) fluoranthene	
Chrysene	
Dibenz (a, h) anthracene	
TPH (EPA 3550)	

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

СоС	RBSL	,	nearest 0.01 reet.		
COL		W-1	W-2	W -3	W -4
	(µg/l)				
Free Product	None				
Thickness					
			1		
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
MTBE	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5				
Lead	Site specific				

### XV. ANALYTICAL RESULTS

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

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



August 21, 2009

12:35:36PM

Client:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn: Tom McElwee

Work Order: NSH0575

Project Name:

Laurel Bay Housing Project

Project Nbr: P/O Nbr: Date Received: [none] 08087 08/07/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
1423 Albatross	NSH0575-01	08/03/09 09:35
1426 Albatross	NSH0575-02	08/03/09 09:15
1428 Albatross	NSH0575-03	08/03/09 13:30
1431 Dove	NSH0575-04	08/03/09 13:45
1440 Dove	NSH0575-05	08/04/09 09:00
1447 Dove	NSH0575-06	08/04/09 09:30
1438 Dove	NSH0575-07	08/04/09 11:45
1441 Dove	NSH0575-08	08/04/09 13:55
1439 Dove	NSH0575-09	08/04/09 15:15

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

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.

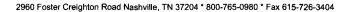
This report has been electronically signed.

Em & Haye

Report Approved By:

Ken A. Hayes

Senior Project Manager





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

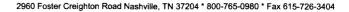
Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-01 (1423 Alb	atross - Soil) S	Sampled: (	08/03/09 09:35					
General Chemistry Parameters								
% Dry Solids	82.8		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00206	1	08/13/09 15:22	SW846 8260B	9081164
Ethylbenzene	ND		mg/kg dry	0.00206	1	08/13/09 15:22	SW846 8260B	9081164
Naphthalene	ND		mg/kg dry	0.00515	1	08/13/09 15:22	SW846 8260B	9081164
Toluene	ND		mg/kg dry	0.00206	1	08/13/09 15:22	SW846 8260B	9081164
Xylenes, total	ND		mg/kg dry	0.00515	1	08/13/09 15:22	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					08/13/09 15:22	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	89 %					08/13/09 15:22	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	102 %					08/13/09 15:22	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	110 %					08/13/09 15:22	SW846 8260B	9081164





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

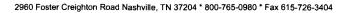
Project Number:

[none]

Received: 08/07/09 08:00

			_
ANAI	VTICA	I DEDOE	)T

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-01 (1423 A	Albatross - Soi	l) - cont.	Sampled: 0	8/03/09 09:3	35				
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0382	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.0370	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	0.0394	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	0.0453	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	0.0358	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	0.0358	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0358	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	0.0358	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	0.0477	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0370	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Fluoranthene	ND		mg/kg dry	0.0405	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Fluorene	ND		mg/kg dry	0.0429	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0370	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Naphthalene	ND		mg/kg dry	0.0489	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Phenanthrene	ND		mg/kg dry	0.0405	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Pyrene	ND	L	mg/kg dry	0.0489	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
1-Methylnaphthalene	ND		mg/kg dry	0.0382	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
2-Methylnaphthalene	ND		mg/kg dry	0.0394	0.0799	1	08/14/09 17:51	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	74 %		•			1	08/14/09 17:51	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	59 %					1	08/14/09 17:51	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	65 %					1	08/14/09 17:51	SW846 8270D	9081773





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

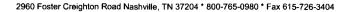
Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-02 (1426 All	batross - Soil) S	Sampled: (	08/03/09 09:15					
General Chemistry Parameters								
% Dry Solids	82.9		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00207	1	08/13/09 15:52	SW846 8260B	9081164
Ethylbenzene	0.00873		mg/kg dry	0.00207	1	08/13/09 15:52	SW846 8260B	9081164
Naphthalene	0.464		mg/kg dry	0.272	50	08/14/09 19:29	SW846 8260B	9082671
Toluene	ND		mg/kg dry	0.00207	1	08/13/09 15:52	SW846 8260B	9081164
Xylenes, total	ND		mg/kg dry	0.00517	1	08/13/09 15:52	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	95 %					08/13/09 15:52	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	90 %					08/14/09 19:29	SW846 8260B	9082671
Surr: Dibromofluoromethane (75-125%)	92 %					08/13/09 15:52	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	97 %					08/14/09 19:29	SW846 8260B	9082671
Surr: Toluene-d8 (76-129%)	99 %					08/13/09 15:52	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	87 %					08/14/09 19:29	SW846 8260B	9082671
Surr: 4-Bromofluorobenzene (67-147%)	104 %					08/13/09 15:52	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	88 %					08/14/09 19:29	SW846 8260B	9082671





THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

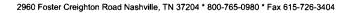
[none]

08/07/09 08:00

Received:

\_\_\_\_\_

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-02 (1426 A	lbatross - So	oil) - cont. Sa	mpled: 0	8/03/09 09:1	15				
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0379	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.0367	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	0.0391	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	0.0450	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	0.0355	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	0.0355	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0355	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	0.0355	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	0.0474	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0367	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Fluoranthene	0.153		mg/kg dry	0.0403	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Fluorene	ND		mg/kg dry	0.0426	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0367	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Naphthalene	0.0648	J	mg/kg dry	0.0486	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Phenanthrene	0.224		mg/kg dry	0.0403	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Pyrene	0.143	CF2, CF6, L1	mg/kg dry	0.0486	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
1-Methylnaphthalene	0.295		mg/kg dry	0.0379	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
2-Methylnaphthalene	0.411		mg/kg dry	0.0391	0.0794	1	08/14/09 18:14	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	77 %					1	08/14/09 18:14	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	54 %					1	08/14/09 18:14	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	63 %					1	08/14/09 18:14	SW846 8270D	9081773





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

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

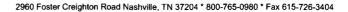
Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-03 (1428 Alb	atross - Soil) S	Sampled: (	08/03/09 13:30					
General Chemistry Parameters								
% Dry Solids	75.9		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds b	y EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00230	1	08/13/09 16:22	SW846 8260B	9081164
Ethylbenzene	ND		mg/kg dry	0.00230	1	08/13/09 16:22	SW846 8260B	9081164
Naphthalene	ND		mg/kg dry	0.00574	1	08/13/09 16:22	SW846 8260B	9081164
Toluene	ND		mg/kg dry	0.00230	1	08/13/09 16:22	SW846 8260B	9081164
Xylenes, total	ND		mg/kg dry	0.00574	1	08/13/09 16:22	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					08/13/09 16:22	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	96 %					08/13/09 16:22	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	95 %					08/13/09 16:22	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	98 %					08/13/09 16:22	SW846 8260B	9081164





10179 Highway 78 Ladson, SC 29456

Tom McElwee

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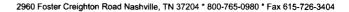
Work Order: NSH0575

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 08/07/09 08:00

			ANALYI	ICAL REPO					
Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-03 (1428 A	Albatross - Sc	oil) - cont. Sa	ampled: 0	8/03/09 13:3	30				
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0418	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.0405	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	0.0431	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Benzo (a) anthracene	0.132		mg/kg dry	0.0496	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Benzo (a) pyrene	0.0566	J, L	mg/kg dry	0.0392	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Benzo (b) fluoranthene	0.0705	J	mg/kg dry	0.0392	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0392	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Benzo (k) fluoranthene	0.0701	J	mg/kg dry	0.0392	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Chrysene	0.133		mg/kg dry	0.0522	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0405	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Fluoranthene	0.260		mg/kg dry	0.0444	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Fluorene	0.0575	J	mg/kg dry	0.0470	0.0875	l	08/14/09 18:38	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0405	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Naphthalene	ND		mg/kg dry	0.0536	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Phenanthrene	0.163		mg/kg dry	0.0444	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Pyrene	0.253	CF2, CF6, L1	mg/kg dry	0.0536	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
1-Methylnaphthalene	0.123		mg/kg dry	0.0418	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
2-Methylnaphthalene	0.165		mg/kg dry	0.0431	0.0875	1	08/14/09 18:38	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	85 %					1	08/14/09 18:38	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	64 %					,	08/14/09 18:38	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	69 %					1	08/14/09 18:38	SW846 8270D	9081773





10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-04 (1431 Do	ve - Soil) Samp	led: 08/0	3/09 13:45					
General Chemistry Parameters								
% Dry Solids	85.9		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00208	1	08/13/09 16:53	SW846 8260B	9081164
Ethylbenzene	0.00423		mg/kg dry	0.00208	1	08/13/09 16:53	SW846 8260B	9081164
Naphthalene	0.638		mg/kg dry	0.243	50	08/14/09 19:59	SW846 8260B	9082671
Toluene	ND		mg/kg dry	0.00208	1	08/13/09 16:53	SW846 8260B	9081164
Xylenes, total	ND		mg/kg dry	0.00521	1	08/13/09 16:53	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	135 %					08/13/09 16:53	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					08/14/09 19:59	SW846 8260B	9082671
Surr: Dibromofluoromethane (75-125%)	130 %	ZX				08/13/09 16:53	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	108 %					08/14/09 19:59	SW846 8260B	9082671
Surr: Toluene-d8 (76-129%)	98 %					08/13/09 16:53	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	82 %					08/14/09 19:59	SW846 8260B	9082671
Surr: 4-Bromofluorobenzene (67-147%)	128 %					08/13/09 16:53	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	92 %					08/14/09 19:59	SW846 8260B	9082671





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

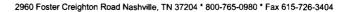
Project Number:

[none]

Received:

08/07/09 08:00

			ANALIT	CAL KEI O				-	
Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-04 (1431 D		_	pled: 08/03/	09 13:45					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.364	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.353	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	0.376	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	0.432	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	0.341	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	0.341	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.341	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	0.341	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	0.455	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.353	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Fluoranthene	ND		mg/kg dry	0.387	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Fluorene	1.69		mg/kg dry	0.410	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.353	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Naphthalene	ND		mg/kg dry	0.467	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Phenanthrene	ND		mg/kg dry	0.387	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Pyrene	ND	L	mg/kg dry	0.467	0.762	10	08/15/09 20:58	SW846 8270D	9081773
1-Methylnaphthalene	4.20		mg/kg dry	0.364	0.762	10	08/15/09 20:58	SW846 8270D	9081773
2-Methylnaphthalene	3.71		mg/kg dry	0.376	0.762	10	08/15/09 20:58	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	85 %					10	08/15/09 20:58	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	86 %					10	08/15/09 20:58	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	79 %					10	08/15/09 20:58	SW846 8270D	9081773





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name: Laurel Bay Housing Project

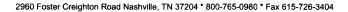
Project Number:

[none]

Received:

08/07/09 08:00

			ii (ii E i i i e i E i i i					
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-05 (1440 Do	ve - Soil) Samp	oled: 08/0	4/09 09:00					
General Chemistry Parameters								
% Dry Solids	82.6		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	0.00351		mg/kg dry	0.00205	1	08/13/09 17:23	SW846 8260B	9081164
Ethylbenzene	1.87		mg/kg dry	0.108	50	08/14/09 20:29	SW846 8260B	9082671
Naphthalene	12.2		mg/kg dry	2.70	500	08/17/09 18:23	SW846 8260B	9082672
Toluene	0.0156		mg/kg dry	0.00205	1	08/13/09 17:23	SW846 8260B	9081164
Xylenes, total	8.08		mg/kg dry	0.270	50	08/14/09 20:29	SW846 8260B	9082671
Surr: 1,2-Dichloroethane-d4 (67-138%)	96 %					08/13/09 17:23	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	87 %					08/14/09 20:29	SW846 8260B	9082671
Surr: 1,2-Dichloroethane-d4 (67-138%)	95 %					08/17/09 18:23	SW846 8260B	9082672
Surr: Dibromofluoromethane (75-125%)	90 %					08/13/09 17:23	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	90 %					08/14/09 20:29	SW846 8260B	9082671
Surr: Dibromofluoromethane (75-125%)	94 %					08/17/09 18:23	SW846 8260B	9082672
Surr: Toluene-d8 (76-129%)	131 %	ZX				08/13/09 17:23	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	95 %					08/14/09 20:29	SW846 8260B	9082671
Surr: Toluene-d8 (76-129%)	94 %					08/17/09 18:23	SW846 8260B	9082672
Surr: 4-Bromofluorobenzene (67-147%)	458 %	ZX				08/13/09 17:23	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/14/09 20:29	SW846 8260B	9082671
Surr: 4-Bromofluorobenzene (67-147%)	94 %					08/17/09 18:23	SW846 8260B	9082672





Client

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

EEG - Small Business Group, Inc. (2449)

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

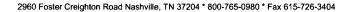
Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-05 (1440 l	Dove - Soil) - co	ont. Sam	pled: 08/04/	09 09:00					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0379	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Acenaphthylene	ND		mg/kg dry	0.0367	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Anthracene	0.357		mg/kg dry	0.0390	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Benzo (a) anthracene	0.0816		mg/kg dry	0.0450	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Benzo (a) pyrene	ND		mg/kg dry	0.0355	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Benzo (b) fluoranthene	0.0599	J	mg/kg dry	0.0355	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0355	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Benzo (k) fluoranthene	ND		mg/kg dry	0.0355	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Chrysene	0.128		mg/kg dry	0.0473	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0367	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Fluoranthene	0.395		mg/kg dry	0.0402	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Fluorene	2.79		mg/kg dry	0.0426	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0367	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Naphthalene	2.33		mg/kg dry	0.0485	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
Phenanthrene	6.70		mg/kg dry	0.201	0.396	5	08/19/09 15:25	SW846 8270D	9082723
Pyrene	0.487		mg/kg dry	0.0485	0.0793	1	08/19/09 04:51	SW846 8270D	9082723
1-Methylnaphthalene	17.2		mg/kg dry	0.379	0.793	10	08/19/09 18:36	SW846 8270D	9082723
2-Methylnaphthalene	23.5		mg/kg dry	0.390	0.793	10	08/19/09 18:36	SW846 8270D	9082723
Surr: Terphenyl-d14 (18-120%)	64 %					1	08/19/09 04:51	SW846 8270D	9082723
Surr: 2-Fluorobiphenyl (14-120%)	84 %					,	08/19/09 04:51	SW846 8270D	9082723
Surr: Nitrobenzene-d5 (17-120%)	182 %	Z	X			1	08/19/09 04:51	SW846 8270D	9082723





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

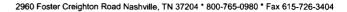
Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-06 (1447 Do	ve - Soil) Samp	oled: 08/04	/09 09:30					
General Chemistry Parameters								
% Dry Solids	75.7		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.106	50	08/18/09 18:56	SW846 8260B	9081749
Ethylbenzene	ND		mg/kg dry	0.106	50	08/18/09 18:56	SW846 8260B	9081749
Naphthalene	0.923		mg/kg dry	0.264	50	08/18/09 18:56	SW846 8260B	9081749
Toluene	ND		mg/kg dry	0.106	50	08/18/09 18:56	SW846 8260B	9081749
Xylenes, total	ND		mg/kg dry	0.264	50	08/18/09 18:56	SW846 8260B	9081749
Surr: 1,2-Dichloroethane-d4 (67-138%)	96 %					08/18/09 18:56	SW846 8260B	9081749
Surr: Dibromofluoromethane (75-125%)	94 %					08/18/09 18:56	SW846 8260B	9081749
Surr: Toluene-d8 (76-129%)	100 %					08/18/09 18:56	SW846 8260B	9081749
Surr: 4-Bromofluorobenzene (67-147%)	106 %					08/18/09 18:56	SW846 8260B	9081749





THE LEADER IN ENVIRONMENTAL TESTING

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

10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

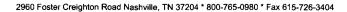
Project Number:

[none]

Received:

08/07/09 08:00

		A	MALII	CAL REFU	KI				
Analyte	Result	Flag U	J <b>nits</b>	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-06 (1447 I	Dove - Soil) - c	ont. Sampled	: 08/04/	09 09:30					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	0.590	m	g/kg dry	0.0413	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Acenaphthylene	ND		g/kg dry	0.0400	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Anthracene	2.23		g/kg dry	0.0426	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Benzo (a) anthracene	7.13	m	g/kg dry	0.245	0.432	5	08/19/09 15:49	SW846 8270D	9082723
Benzo (a) pyrene	2.15	m	g/kg dry	0.0387	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Benzo (b) fluoranthene	2.57	m	g/kg dry	0.0387	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Benzo (g,h,i) perylene	0.581	m	g/kg dry	0.0387	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Benzo (k) fluoranthene	2.00	m	g/kg dry	0.0387	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Chrysene	4.14	m	g/kg dry	0.0516	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Dibenz (a,h) anthracene	0.443	m	g/kg dry	0.0400	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Fluoranthene	15.5	m	g/kg dry	0.439	0.864	10	08/19/09 19:00	SW846 8270D	9082723
Fluorene	1.70	m	g/kg dry	0.0464	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Indeno (1,2,3-cd) pyrene	0.690	m	g/kg dry	0.0400	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Naphthalene	ND	m	g/kg dry	0.0529	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Phenanthrene	15.3	m	g/kg dry	0.219	0.432	5	08/19/09 15:49	SW846 8270D	9082723
Pyrene	18.3	m	g/kg dry	0.264	0.432	5	08/19/09 15:49	SW846 8270D	9082723
1-Methylnaphthalene	2.44	m	g/kg dry	0.0413	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
2-Methylnaphthalene	3.79	m	g/kg dry	0.0426	0.0864	1	08/19/09 05:15	SW846 8270D	9082723
Surr: Terphenyl-d14 (18-120%)	68 %					1	08/19/09 05:15	SW846 8270D	908272
Surr: 2-Fluorobiphenyl (14-120%)	62 %					1	08/19/09 05:15	SW846 8270D	908272.
Surr: Nitrobenzene-d5 (17-120%)	92 %					1	08/19/09 05:15	SW846 8270D	908272





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

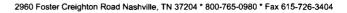
Project Number:

[none]

Received:

08/07/09 08:00

4 - alada				MDI	Dilution	Analysis	Mathad	D 4 1
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSH0575-07 (1438 Do	ve - Soil) Samp	oled: 08/04	4/09 11:45					
General Chemistry Parameters								
% Dry Solids	86.1		%	0.500	1	08/19/09 14:20	SW-846	9082734
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	ND		mg/kg dry	0.00201	1	08/13/09 18:23	SW846 8260B	9081164
Ethylbenzene	1.18		mg/kg dry	0.0989	50	08/14/09 21:00	SW846 8260B	9082671
Naphthalene	4.42		mg/kg dry	0.247	50	08/14/09 21:00	SW846 8260B	9082671
Toluene	0.00805		mg/kg dry	0.00201	1	08/13/09 18:23	SW846 8260B	9081164
Xylenes, total	6.20		mg/kg dry	0.247	50	08/14/09 21:00	SW846 8260B	9082671
Surr: 1,2-Dichloroethane-d4 (67-138%)	95 %					08/13/09 18:23	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	91 %					08/14/09 21:00	SW846 8260B	9082671
Surr: Dibromofluoromethane (75-125%)	88 %					08/13/09 18:23	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	92 %					08/14/09 21:00	SW846 8260B	9082671
Surr: Toluene-d8 (76-129%)	108 %					08/13/09 18:23	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	94 %					08/14/09 21:00	SW846 8260B	9082671
Surr: 4-Bromofluorobenzene (67-147%)	126 %					08/13/09 18:23	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	105 %					08/14/09 21:00	SW846 8260B	9082671





10179 Highway 78 Ladson, SC 29456

Attn

Ladson, SC 29456 Tom McElwee Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/07/09 08:00

			ANALIII	CAL REFU	N I				
Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-07 (1438 D	ove - Soil) - c	ont. Samp	led: 08/04/	09 11:45					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.368	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.357	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Anthracene	0.453	J, L	mg/kg dry	0.380	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	0.437	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	0.345	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	0.345	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.345	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	0.345	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	0.460	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.357	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Fluoranthene	1.12		mg/kg dry	0.391	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Fluorene	2.54		mg/kg dry	0.414	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.357	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Naphthalene	6.93		mg/kg dry	0.472	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Phenanthrene	4.49		mg/kg dry	0.391	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Pyrene	ND	L	mg/kg dry	0.472	0.771	10	08/15/09 22:09	SW846 8270D	9081773
1-Methylnaphthalene	21.7		mg/kg dry	0.368	0.771	10	08/15/09 22:09	SW846 8270D	9081773
2-Methylnaphthalene	30.1		mg/kg dry	0.380	0.771	10	08/15/09 22:09	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	82 %					10	08/15/09 22:09	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	86 %					10	08/15/09 22:09	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	194 %	ZX				10	08/15/09 22:09	SW846 8270D	9081773





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-08 (1441 Do		_						
	ve - Sun) Sam	picu. vo/u	14/07 13.33					
General Chemistry Parameters								
% Dry Solids	81.6		%	0.500	1	08/19/09 10:43	SW-846	9082732
Selected Volatile Organic Compounds	by EPA Method	1 8260B						
Benzene	0.00373		mg/kg dry	0.00196	1	08/13/09 18:53	SW846 8260B	9081164
Ethylbenzene	ND	RL1	mg/kg dry	0.103	50	08/14/09 21:30	SW846 8260B	9082671
Naphthalene	0.697		mg/kg dry	0.258	50	08/14/09 21:30	SW846 8260B	9082671
Toluene	0.193		mg/kg dry	0.103	50	08/14/09 21:30	SW846 8260B	9082671
Xylenes, total	2.86		mg/kg dry	0.258	50	08/14/09 21:30	SW846 8260B	9082671
Surr: 1,2-Dichloroethane-d4 (67-138%)	114 %					08/13/09 18:53	SW846 8260B	9081164
Surr: 1,2-Dichloroethane-d4 (67-138%)	92 %					08/14/09 21:30	SW846 8260B	9082671
Surr: Dibromofluoromethane (75-125%)	101 %					08/13/09 18:53	SW846 8260B	9081164
Surr: Dibromofluoromethane (75-125%)	89 %					08/14/09 21:30	SW846 8260B	9082671
Surr: Toluene-d8 (76-129%)	161 %	ZX				08/13/09 18:53	SW846 8260B	9081164
Surr: Toluene-d8 (76-129%)	94 %					08/14/09 21:30	SW846 8260B	9082671
Surr: 4-Bromofluorobenzene (67-147%)	349 %	ZX				08/13/09 18:53	SW846 8260B	9081164
Surr: 4-Bromofluorobenzene (67-147%)	110 %					08/14/09 21:30	SW846 8260B	908267





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

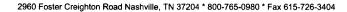
Laurel Bay Housing Project

Project Number: [none]

Received:

08/07/09 08:00

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-08 (1441 D	ove - Soil) - co	ont. Sam	pled: 08/04/0	9 13:55					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	1.53	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	1.48	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	1.58	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	1.82	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	1.44	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	1.44	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	1.44	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	1.44	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	1.91	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	1.48	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Fluoranthene	ND		mg/kg dry	1.63	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Fluorene	ND		mg/kg dry	1.72	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	1.48	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Naphthalene	ND		mg/kg dry	1.96	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Phenanthrene	ND		mg/kg dry	1.63	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Pyrene	2.36	J, L	mg/kg dry	1.96	3.21	20	08/14/09 20:37	SW846 8270D	9081773
I-Methylnaphthalene	6.96		mg/kg dry	1.53	3.21	20	08/14/09 20:37	SW846 8270D	9081773
2-Methylnaphthalene	5.60		mg/kg dry	1.58	3.21	20	08/14/09 20:37	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	98 %					20	08/14/09 20:37	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	78 %						08/14/09 20:37	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	150 %	ZX	•			20	08/14/09 20:37	SW846 8270D	9081773





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

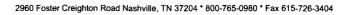
Work Order: NSH0575

Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 08/07/09 08:00

		•		0				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH0575-09 (1439 Do	ve - Soil) Sam <sub>l</sub>	pled: 08/0	4/09 15:15					
General Chemistry Parameters								
% Dry Solids	80.6		%	0.500	1	08/19/09 10:43	SW-846	9082732
Selected Volatile Organic Compounds	by EPA Method	8260B						
Benzene	0.00268		mg/kg dry	0.00197	1	08/17/09 16:03	SW846 8260B	9082672
Ethylbenzene	0.0283		mg/kg dry	0.00197	1	08/17/09 16:03	SW846 8260B	9082672
Naphthalene	1.27		mg/kg dry	0.350	50	08/17/09 18:53	SW846 8260B	9082672
Toluene	ND		mg/kg dry	0.00197	1	08/17/09 16:03	SW846 8260B	9082672
Xylenes, total	0.122		mg/kg dry	0.00492	1	08/17/09 16:03	SW846 8260B	9082672
Surr: 1,2-Dichloroethane-d4 (67-138%)	103 %					08/17/09 16:03	SW846 8260B	9082672
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					08/17/09 18:53	SW846 8260B	9082672
Surr: Dibromofluoromethane (75-125%)	99 %					08/17/09 16:03	SW846 8260B	9082672
Surr: Dibromofluoromethane (75-125%)	96 %					08/17/09 18:53	SW846 8260B	9082672
Surr: Toluene-d8 (76-129%)	106 %					08/17/09 16:03	SW846 8260B	9082672
Surr: Toluene-d8 (76-129%)	89 %					08/17/09 18:53	SW846 8260B	9082672
Surr: 4-Bromofluorobenzene (67-147%)	129 %					08/17/09 16:03	SW846 8260B	9082672
Surr: 4-Bromofluorobenzene (67-147%)	96 %					08/17/09 18:53	SW846 8260B	9082672





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

[none]

Project Name:

Laurel Bay Housing Project

Project Number:

Received:

08/07/09 08:00

					MADI	Dilution	•		
Analyte	Result	Flag	Units	MDL	MRL	Factor	Date/Time	Method	Batch
Sample ID: NSH0575-09 (1439 I	Dove - Soil) - c	ont. Sam	pled: 08/04/	09 15:15					
Polyaromatic Hydrocarbons by EPA	8270D								
Acenaphthene	ND		mg/kg dry	0.0394	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Acenaphthylene	ND		mg/kg dry	0.0381	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Anthracene	ND	L	mg/kg dry	0.0406	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Benzo (a) anthracene	ND		mg/kg dry	0.0467	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Benzo (a) pyrene	ND	L	mg/kg dry	0.0369	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Benzo (b) fluoranthene	ND		mg/kg dry	0.0369	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0369	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Benzo (k) fluoranthene	ND		mg/kg dry	0.0369	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Chrysene	ND		mg/kg dry	0.0492	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0381	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Fluoranthene	ND		mg/kg dry	0.0418	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Fluorene	0.202		mg/kg dry	0.0443	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0381	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Naphthalene	0.194		mg/kg dry	0.0504	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Phenanthrene	0.421		mg/kg dry	0.0418	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Pyrene	0.0586	J, L	mg/kg dry	0.0504	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
1-Methylnaphthalene	0.917		mg/kg dry	0.0394	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
2-Methylnaphthalene	1.33		mg/kg dry	0.0406	0.0824	1	08/14/09 21:01	SW846 8270D	9081773
Surr: Terphenyl-d14 (18-120%)	87 %					1	08/14/09 21:01	SW846 8270D	9081773
Surr: 2-Fluorobiphenyl (14-120%)	55 %					1	08/14/09 21:01	SW846 8270D	9081773
Surr: Nitrobenzene-d5 (17-120%)	64 %					1	08/14/09 21:01	SW846 8270D	9081773



10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order: NSH0575

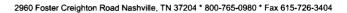
Project Name: Laurel Bay Housing Project

Project Number: [none]

Received: 08/07/09 08:00

#### SAMPLE EXTRACTION DATA

			Wt/Vol				Extraction
Parameter	Batch	Lab Number	Extracted	Extracted Vol	Date	Analyst	Method
Polyaromatic Hydrocarbons by EPA	8270D						
SW846 8270D	9081773	NSH0575-01	30.38	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-02	30.55	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9082723	NSH0575-02RE1	30.14	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9081773	NSH0575-03	30.26	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9082723	NSH0575-03RE1	30.39	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9081773	NSH0575-04	30.69	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-04RE1	30.69	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9082723	NSH0575-04RE2	30.77	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9082723	NSH0575-04RE3	30.77	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9081773	NSH0575-05	30.44	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-05RE1	30.44	1.00	08/13/09 14:30	TEM TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-05RE2	30.44 30.70	1.00	08/13/09 14:30 08/18/09 11:30	AJF	EPA 3550C EPA 3550C
SW846 8270D SW846 8270D	9082723	NSH0575-05RE3 NSH0575-05RE4	30.70	1.00	08/18/09 11:30	AJF	EPA 3550C EPA 3550C
SW846 8270D	9082723 9082723	NSH0575-05RE5	30.70	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9082723	NSH0575-06	30.76	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-06RE1	30.26	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-06RE2	30.26	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9082723	NSH0575-06RE3	30.72	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9082723	NSH0575-06RE4	30.72	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9082723	NSH0575-06RE5	30.72	1.00	08/18/09 11:30	AJF	EPA 3550C
SW846 8270D	9081773	NSH0575-07	30.28	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-07RE1	30.28	1.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-08	30.72	2.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-08RE1	30.72	2.00	08/13/09 14:30	TEM	EPA 3550C
SW846 8270D	9081773	NSH0575-09	30.26	1.00	08/13/09 14:30	TEM	EPA 3550C
Selected Volatile Organic Compound	ds by EPA Method	8260B					
SW846 8260B	9081164	NSH0575-01	5.86	5.00	08/03/09 09:35	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-02	5.83	5.00	08/03/09 09:15	JRL	EPA 5035
SW846 8260B	9082671	NSH0575-02RE1	5.54	5.00	08/03/09 09:15	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-03	5.74	5.00	08/03/09 13:30	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-04	5.59	5.00	08/03/09 13:45	JRL	EPA 5035
SW846 8260B	9082671	NSH0575-04RE1	6.00	5.00	08/03/09 13:45	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-05	5.92	5.00	08/04/09 09:00	JRL	EPA 5035
SW846 8260B	9082671	NSH0575-05RE1	5.61	5.00	08/04/09 09:00	JRL	EPA 5035
SW846 8260B	9082672	NSH0575-05RE2	5.61	5.00	08/04/09 09:00	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-06	6.12	5.00	08/04/09 09:30	JRL	EPA 5035
SW846 8260B	9082672	NSH0575-06RE1	5.94	5.00	08/04/09 09:30	JRL	EPA 5035
SW846 8260B	9081749	NSH0575-06RE2	6.25	5.00	08/04/09 09:30	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-07	5.78	5.00	08/04/09 11:45	JRL	EPA 5035
SW846 8260B	9082671	NSH0575-07RE1	5.87	5.00	08/04/09 11:45	JRL	EPA 5035
SW846 8260B	9081164	NSH0575-08	6.25 5.94	5.00	08/04/09 13:55 08/04/09 13:55	JRL JRL	EPA 5035 EPA 5035
SW846 8260B	9082671	NSH0575-08RE1	5,94 6,58	5.00	08/04/09 13:35	JRL JRL	EPA 5035 EPA 5035
SW846 8260B	9081164	NSH0575-09	6.58	5.00	06/04/09 15:15	JKL	EFM 3033





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

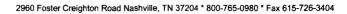
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Received:

08/07/09 08:00

#### SAMPLE EXTRACTION DATA

			Wt/Vol				Extraction
Parameter	Batch	Lab Number	Extracted	Extracted Vol	Date	Analyst	Method
SW846 8260B	9082672	NSH0575-09RE1	6.30	5.00	08/04/09 15:15	JRL	EPA 5035
SW846 8260B	9082672	NSH0575-09RE2	4.43	5.00	08/04/09 15:15	JRL	EPA 5035





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order: NSH0575

Project Name: Laurel Bay Housing Project

Project Number:

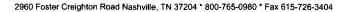
[none]

Received:

08/07/09 08:00

## 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 82	60B				
9081164-BLK1						
Benzene	< 0.000670		mg/kg wet	9081164	9081164-BLK1	08/13/09 14:21
Ethylbenzene	< 0.000670		mg/kg wet	9081164	9081164-BLK1	08/13/09 14:21
Naphthalene	< 0.00170		mg/kg wet	9081164	9081164-BLK1	08/13/09 14:21
Toluene	< 0.000400		mg/kg wet	9081164	9081164-BLK1	08/13/09 14:21
Xylenes, total	< 0.00130		mg/kg wet	9081164	9081164-BLK1	08/13/09 14:21
Surrogate: 1,2-Dichloroethane-d4	103%			9081164	9081164-BLK1	08/13/09 14:21
Surrogate: Dibromofluoromethane	94%			9081164	9081164-BLK1	08/13/09 14:21
Surrogate: Toluene-d8	94%			9081164	9081164-BLK1	08/13/09 14:21
Surrogate: 4-Bromofluorobenzene	97%			9081164	9081164-BLK1	08/13/09 14:21
9081749-BLK1						
Benzene	< 0.0335		mg/kg wet	9081749	9081749-BLK1	08/18/09 15:16
Ethylbenzene	< 0.0335		mg/kg wet	9081749	9081749-BLK1	08/18/09 15:16
Naphthalene	< 0.0850		mg/kg wet	9081749	9081749-BLK1	08/18/09 15:16
Toluene	0.0240	В	mg/kg wet	9081749	9081749-BLK1	08/18/09 15:16
Xylenes, total	< 0.0650		mg/kg wet	9081749	9081749-BLK1	08/18/09 15:16
Surrogate: 1,2-Dichloroethane-d4	104%			9081749	9081749-BLK1	08/18/09 15:16
Surrogate: Dibromofluoromethane	99%			9081749	9081749-BLK1	08/18/09 15:16
Surrogate: Toluene-d8	102%			9081749	9081749-BLK1	08/18/09 15:16
Surrogate: 4-Bromofluorobenzene	102%			9081749	9081749-BLK1	08/18/09 15:16
9082671-BLK1						
Benzene	< 0.000670		mg/kg wet	9082671	9082671-BLK1	08/14/09 18:59
Ethylbenzene	< 0.000670		mg/kg wet	9082671	9082671-BLK1	08/14/09 18:59
Naphthalene	< 0.00170		mg/kg wet	9082671	9082671-BLK1	08/14/09 18:59
Toluene	< 0.000400		mg/kg wet	9082671	9082671-BLK1	08/14/09 18:59
Xylenes, total	< 0.00130		mg/kg wet	9082671	9082671-BLK1	08/14/09 18:59
Surrogate: 1,2-Dichloroethane-d4	99%			9082671	9082671-BLK1	08/14/09 18:59
Surrogate: Dibromofluoromethane	95%			9082671	9082671-BLK1	08/14/09 18:59
Surrogate: Toluene-d8	95%			9082671	9082671-BLK1	08/14/09 18:59
Surrogate: 4-Bromofluorobenzene	95%			9082671	9082671-BLK1	08/14/09 18:59
9082672-BLK1						
Benzene	<0.000670		mg/kg wet	9082672	9082672-BLK1	08/17/09 14:31
Ethylbenzene	<0.000670		mg/kg wet	9082672	9082672-BLK1	08/17/09 14:31
Naphthalene	< 0.00170		mg/kg wet	9082672	9082672-BLK1	08/17/09 14:31
Toluene	< 0.000400		mg/kg wet	9082672	9082672-BLK1	08/17/09 14:31
Xylenes, total	<0.00130		mg/kg wet	9082672	9082672-BLK1	08/17/09 14:31
Surrogate: 1,2-Dichloroethane-d4	106%			9082672	9082672-BLK1	08/17/09 14:31
Surrogate: Dibromofluoromethane	101%			9082672	9082672-BLK1	08/17/09 14:31
Surrogate: Toluene-d8	94%			9082672	9082672-BLK1	08/17/09 14:31
Surrogate: 4-Bromofluorobenzene	94%			9082672	9082672-BLK1	08/17/09 14:31





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

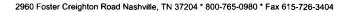
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Received:

08/07/09 08:00

## PROJECT QUALITY CONTROL DATA Blank - Cont.

Polysromatic Hydrocarbons by EPA 8270D    Polysromatic Hydrocarbons by							•
Polyaromatic Hydrocarbons by EPA 8270	Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
	Selected Volatile Organic Comp	pounds by EPA Method 82	60B				
	Polyaromatic Hydrocarbons by	EPA 8270D					
Acenaphthren         <0.0320         mgkg wet         <0981773         9081773-BLK1         081409         15.30           Acenaphthylene         <0.0330         mgkg wet         <0981773         9081773-BLK1         081409         15.30           Barco (a) phracene         <0.0300         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Berno (a) phracene         <0.0300         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Berno (b) fluoranthane         <0.0300         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Berno (b) fluoranthane         <0.0000         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Berno (b) fluoranthane         <0.0000         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Chysen         <0.0400         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Flooranthene         <0.0140         mgkg wet         <0981773         <0981773-BLK1         0814409         15.30           Flooranthene         <0.0140         mgkg wet         <0981773         <0981773-BLK1         08144	·						
Anthricene         < 0.0330         mgkg wel         9081773         9081773-BLK1         08/14/09         15.00           Brazo (a) pripene         < 0.0300		< 0.0320		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Benzo (a) anthracea	Acenaphthylene	< 0.0310		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Benzo (a) pyrene   0.0300   mg/kg wet   9081773   9081773-BLK1   081409   15:30	Anthracene	< 0.0330		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Benzo (b, f) noranthene         <0.0300         mg/kg wet         9081773         9081773-BLK1         08/1409         15:30           Benzo (k, h) perylene         <0.0300	Benzo (a) anthracene	< 0.0380		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Benzo (g.h.i) perylene	Benzo (a) pyrene	<0.0300		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Benzo (k) flooranthene	Benzo (b) fluoranthene	< 0.0300		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Chrysene         -0.0400         mg/kg wet         9081773         9081773-BLK1         08/14/09         5.30           Dibera (a,b) anthracene         -0.0310         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           Fluorene         -0.0360         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           Fluorene         -0.0360         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           Naphthalene         -0.0310         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           Pyrene         -0.0410         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           Pyrene         -0.0410         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           1-Methylnaphthalene         -0.0320         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           2-Methylnaphthalene         -0.0330         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30           2-Methylnaphthalene         -0.0330         mg/kg wet         9081773         9081773-BLK1         08/14/09         15.30 <td>Benzo (g,h,i) perylene</td> <td>&lt; 0.0300</td> <td></td> <td>mg/kg wet</td> <td>9081773</td> <td>9081773-BLK1</td> <td>08/14/09 15:30</td>	Benzo (g,h,i) perylene	< 0.0300		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Dienz (a,h) anthracene	Benzo (k) fluoranthene	< 0.0300		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Fluoranthene         <0.0340         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Fluorene         <0.0360         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Indeno (1,2,3-cd) pyrene         <0.0310         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Phenanthrene         <0.0410         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Pyrene         <0.0410         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           1-Methylnaphthalene         <0.0320         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           2-Methylnaphthalene         <0.0330         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Surrogate: Terphenyl-dl 4         96%         9081773         9081773-BLK1         08/14/09         15:30           Surrogate: Nitrobemene-d5         86%         9081773         9081773-BLK1         08/14/09         15:30           Death Surrogate: Nitrobemene-d5         80%         9081773         9081773-BLK1         08/14/09         15:30           Deat	Chrysene	< 0.0400		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Fluoramhene         <0.0340         mg/kg wet         9081773         9081773-BLK1         08/14/09         15:30           Fluorene         <0.0360		< 0.0310			9081773	9081773-BLK1	08/14/09 15:30
Fluorene	Fluoranthene	< 0.0340			9081773	9081773-BLK1	08/14/09 15:30
Naphthalene	Fluorene	< 0.0360		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Phenanthrene   <0.0340   mg/kg wet   9081773   9081773-BLK1   08/14/09   15:30     Pyrene   <0.0410   mg/kg wet   9081773   9081773-BLK1   08/14/09   15:30     1-Methylnaphthalene   <0.0320   mg/kg wet   9081773   9081773-BLK1   08/14/09   15:30     2-Methylnaphthalene   <0.0330   mg/kg wet   9081773   9081773-BLK1   08/14/09   15:30     Surrogate: Terphenyl-d14   96%   9081773   9081773-BLK1   08/14/09   15:30     Surrogate: 2-Fluorobiphenyl   81%   9081773   9081773-BLK1   08/14/09   15:30     Surrogate: Nitrobenzene-d5   86%   9082723   9082723-BLK1   08/19/09   02:02     Surrogate: Nitrobenzene-d5   9082723   9082723-BLK1	Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Pyrene	Naphthalene	< 0.0410		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
1-Methylnaphthalene	Phenanthrene	< 0.0340		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
2-Methylnaphthalene	Pyrene	< 0.0410		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Surrogate: Terphenyl-d144	1-Methylnaphthalene	< 0.0320		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Surrogate: 2-Fluorobiphenyl   81%   9081773   9081773-BLK1   08/14/09   15:30	2-Methylnaphthalene	< 0.0330		mg/kg wet	9081773	9081773-BLK1	08/14/09 15:30
Surrogate: Nitrobenzene-d5   86%   9081773   9081773-BLK1   08/14/09   15:30	Surrogate: Terphenyl-d14	96%			9081773	9081773-BLK1	08/14/09 15:30
Surrogate: Nitrobenzene-d5   86%   9081773   9081773-BLK1   08/14/09   15:30	Surrogate: 2-Fluorobiphenyl	81%			9081773	9081773-BLK1	08/14/09 15:30
Acenaphthene       <0.0320       mg/kg wet       9082723       9082723-BLK1       08/19/09       02:02         Acenaphthylene       <0.0310	Surrogate: Nitrobenzene-d5				9081773	9081773-BLK1	08/14/09 15:30
Acenaphthene       <0.0320       mg/kg wet       9082723       9082723-BLK1       08/19/09       02:02         Acenaphthylene       <0.0310	0002722 DI K4						
Acenaphthylene		< 0.0320		mg/kg wet	9082723	9082723-BLK1	08/19/09 02:02
Anthracene <0.0330 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (a) anthracene <0.0380 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (a) pyrene <0.0300 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (b) fluoranthene <0.0300 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (g,h,i) perylene <0.0300 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (k) fluoranthene <0.0300 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Benzo (k) fluoranthene <0.0300 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Chrysene <0.0400 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Dibenz (a,h) anthracene <0.0310 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Fluoranthene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Fluorene <0.0360 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Indeno (1,2,3-cd) pyrene <0.0310 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Naphthalene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Phenanthrene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02  Phenanthrene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02	•						
Benzo (a) anthracene         <0.0380         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Benzo (a) pyrene         <0.0300	• •						
Benzo (a) pyrene         <0.0300         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Benzo (b) fluoranthene         <0.0300				• •			
Benzo (b) fluoranthene       <0.0300       mg/kg wet       9082723       9082723-BLK1       08/19/09       02:02         Benzo (g,h,i) perylene       <0.0300							
Benzo (g,h,i) perylene         <0.0300         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Benzo (k) fluoranthene         <0.0300							
Benzo (k) fluoranthene         <0.0300         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Chrysene         <0.0400	• •			2 2			
Chrysene         <0.0400         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Dibenz (a,h) anthracene         <0.0310	<del>-</del>						
Dibenz (a,h) anthracene       <0.0310       mg/kg wet       9082723       9082723-BLK1       08/19/09       02:02         Fluoranthene       <0.0340							
Fluoranthene         <0.0340         mg/kg wet         9082723         9082723-BLK1         08/19/09 02:02           Fluorene         <0.0360	-						
Fluorene <0.0360 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02 Indeno (1,2,3-cd) pyrene <0.0310 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02 Naphthalene <0.0410 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02 Phenanthrene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02	,						
Indeno (1,2,3-cd) pyrene         <0.0310         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Naphthalene         <0.0410							
Naphthalene         <0.0410         mg/kg wet         9082723         9082723-BLK1         08/19/09         02:02           Phenanthrene         <0.0340							
Phenanthrene <0.0340 mg/kg wet 9082723 9082723-BLK1 08/19/09 02:02							
• •	•						
- 1	Pyrene	< 0.0410		mg/kg wet	9082723	9082723-BLK1	08/19/09 02:02





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

Ladson, SC 29456

10179 Highway 78

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

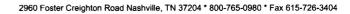
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Received:

08/07/09 08:00

#### PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbon	s by EPA 8270D					
9082723-BLK1						
1-Methylnaphthalene	< 0.0320		mg/kg wet	9082723	9082723-BLK1	08/19/09 02:02
2-Methylnaphthalene	< 0.0330		mg/kg wet	9082723	9082723-BLK1	08/19/09 02:02
Surrogate: Terphenyl-d14	78%			9082723	9082723-BLK1	08/19/09 02:02
Surrogate: 2-Fluorobiphenyl	70%			9082723	9082723-BLK1	08/19/09 02:02
Surrogate: Nitrobenzene-d5	81%			9082723	9082723-BLK1	08/19/09 02:02





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

### PROJECT QUALITY CONTROL DATA

#### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters 9082732-DUP1 % Dry Solids	81.6	82.7		%	1	20	9082732	NSH0575-08		08/19/09 10:43
<b>9082734-DUP1</b> % Dry Solids	85.5	85.8		%	0.4	20	9082734	NSH1273-05		08/19/09 14:20



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

### PROJECT QUALITY CONTROL DATA

LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compou	nds by EPA Method 82	60B						
9081164-BS1								
Benzene	50.0	50.8		ug/kg	102%	78 - 126	9081164	08/13/09 12:19
Ethylbenzene	50.0	51.8		ug/kg	104%	79 - 130	9081164	08/13/09 12:19
Naphthalene	50.0	52.5		ug/kg	105%	72 - 150	9081164	08/13/09 12:19
Toluene	50.0	49.4		ug/kg	99%	76 - 126	9081164	08/13/09 12:19
Xylenes, total	150	157		ug/kg	105%	80 - 130	9081164	08/13/09 12:19
Surrogate: 1,2-Dichloroethane-d4	50.0	52.5			105%	67 - 138	9081164	08/13/09 12:19
Surrogate: Dibromofluoromethane	50.0	50.2			100%	75 - 125	9081164	08/13/09 12:19
Surrogate: Toluene-d8	50.0	49.2			98%	76 - 129	9081164	08/13/09 12:19
Surrogate: 4-Bromofluorobenzene	50.0	49.0			98%	67 - 147	9081164	08/13/09 12:19
9081749-BS1								
Benzene	50.0	42.4		ug/kg	85%	78 - 126	9081749	08/18/09 12:30
Ethylbenzene	50.0	48.8		ug/kg	98%	79 - 130	9081749	08/18/09 12:30
Naphthalene	50.0	53.0		ug/kg	106%	72 - 150	9081749	08/18/09 12:30
Toluene	50.0	47.6		ug/kg	95%	76 - 126	9081749	08/18/09 12:30
Xylenes, total	150	149		ug/kg	99%	80 - 130	9081749	08/18/09 12:30
Surrogate: 1,2-Dichloroethane-d4	25.0	23.2			93%	67 - 138	9081749	08/18/09 12:30
Surrogate: Dibromofluoromethane	25.0	24.7			99%	75 - 125	9081749	08/18/09 12:30
Surrogate: Toluene-d8	25.0	26.5			106%	76 - 129	9081749	08/18/09 12:30
Surrogate: 4-Bromofluorobenzene	25.0	22.2			89%	67 - 147	9081749	08/18/09 12:30
9082671-BS1								
Benzene	50.0	49.9		ug/kg	100%	78 - 126	9082671	08/14/09 16:59
Ethylbenzene	50.0	52.1		ug/kg	104%	79 - 130	9082671	08/14/09 16:59
Naphthalene	50.0	55.7		ug/kg	111%	72 - 150	9082671	08/14/09 16:59
Toluene	50.0	50.1		ug/kg	100%	76 - 126	9082671	08/14/09 16:59
Xylenes, total	150	155		ug/kg	104%	80 - 130	9082671	08/14/09 16:59
Surrogate: 1,2-Dichloroethane-d4	50.0	51.6			103%	67 - 138	9082671	08/14/09 16:59
Surrogate: Dibromofluoromethane	50.0	50.5			101%	75 - 125	9082671	08/14/09 16:59
Surrogate: Toluene-d8	50.0	50.0			100%	76 - 129	9082671	08/14/09 16:59
Surrogate: 4-Bromofluorobenzene	50.0	50.5			101%	67 - 147	9082671	08/14/09 16:59
9082672-BS1								
Benzene	50.0	55.8		ug/kg	112%	78 - 126	9082672	08/17/09 12:30
Ethylbenzene	50.0	53.9		ug/kg	108%	79 - 130	9082672	08/17/09 12:30
Naphthalene	50.0	59.8		ug/kg	120%	72 - 150	9082672	08/17/09 12:30
Toluene	50.0	52.1		ug/kg	104%	76 - 126	9082672	08/17/09 12:30
Xylenes, total	150	163		ug/kg	109%	80 - 130	9082672	08/17/09 12:30
Surrogate: 1,2-Dichloroethane-d4	50.0	55.2			110%	67 - 138	9082672	08/17/09 12:30
Surrogate: Dibromofluoromethane	50.0	54.5			109%	75 - 125	9082672	08/17/09 12:30
Surrogate: Toluene-d8	50.0	49.2			98%	76 - 129	9082672	08/17/09 12:30
Surrogate: 4-Bromofluorobenzene	50.0	50.2			100%	67 - 147	9082672	08/17/09 12:30



10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

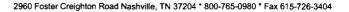
Project Number: [none]

Received:

08/07/09 08:00

# PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compo	ounds by EPA Method 82	60B						
Polyaromatic Hydrocarbons by E	EPA 8270D							
9081773-BS1								
Acenaphthene	1.67	1.43		mg/kg wet	86%	49 - 120	9081773	08/14/09 15:5
Acenaphthylene	1.67	1.49		mg/kg wet	90%	52 - 120	9081773	08/14/09 15:5
Anthracene	1.67	1.71		mg/kg wet	103%	58 - 120	9081773	08/14/09 15::
Benzo (a) anthracene	1.67	1.62		mg/kg wet	97%	57 - 120	9081773	08/14/09 15::
Benzo (a) pyrene	1.67	1.70		mg/kg wet	102%	55 - 120	9081773	08/14/09 15::
Benzo (b) fluoranthene	1.67	1.82		mg/kg wet	109%	51 - 123	9081773	08/14/09 15::
Benzo (g,h,i) perylene	1.67	1.53		mg/kg wet	92%	49 - 121	9081773	08/14/09 15::
Benzo (k) fluoranthene	1.67	1.44		mg/kg wet	86%	42 - 129	9081773	08/14/09 15::
Chrysene	1.67	1.56		mg/kg wet	94%	55 - 120	9081773	08/14/09 15::
Dibenz (a,h) anthracene	1.67	1.60		mg/kg wet	96%	50 - 123	9081773	08/14/09 15::
Fluoranthene	1.67	1.54		mg/kg wet	93%	58 - 120	9081773	08/14/09 15::
Fluorene	1.67	1.44		mg/kg wet	86%	54 - 120	9081773	08/14/09 15:
ndeno (1,2,3-cd) pyrene	1.67	1.59		mg/kg wet	95%	50 - 122	9081773	08/14/09 15:
Naphthalene	1.67	1.22		mg/kg wet	73%	28 - 120	9081773	08/14/09 15:
Phenanthrene	1.67	1.52		mg/kg wet	91%	56 - 120	9081773	08/14/09 15:
Pyrene	1.67	1.70		mg/kg wet	102%	56 - 120	9081773	08/14/09 15:
-Methylnaphthalene	1.67	1.21		mg/kg wet	73%	36 - 120	9081773	08/14/09 15:
-Methylnaphthalene	1.67	1.23		mg/kg wet	74%	36 - 120	9081773	08/14/09 15:
Surrogate: Terphenyl-d14	1.67	1.66			99%	18 - 120	9081773	08/14/09 15:
Surrogate: 2-Fluorobiphenyl	1.67	1.38			83%	14 - 120	9081773	08/14/09 15:
Surrogate: Nitrobenzene-d5	1.67	1.37			82%	17 - 120	9081773	08/14/09 15:
082723-BS1								
Acenaphthene	1.67	1.16		mg/kg wet	70%	49 - 120	9082723	08/19/09 02:
Acenaphthylene	1.67	1.18		mg/kg wet	71%	52 - 120	9082723	08/19/09 02:
Anthracene	1.67	1.43		mg/kg wet	86%	58 - 120	9082723	08/19/09 02:
Benzo (a) anthracene	1.67	1.36		mg/kg wet	82%	57 - 120	9082723	08/19/09 02:
Benzo (a) pyrene	1.67	1.39		mg/kg wet	83%	55 - 120	9082723	08/19/09 02:
Benzo (b) fluoranthene	1.67	1.47		mg/kg wet	88%	51 - 123	9082723	08/19/09 02:
Benzo (g,h,i) perylene	1.67	1.29		mg/kg wet	77%	49 - 121	9082723	08/19/09 02:
Benzo (k) fluoranthene	1.67	1.17		mg/kg wet	70%	42 - 129	9082723	08/19/09 02:
Thrysene	1.67	1.30		mg/kg wet	78%	55 - 120	9082723	08/19/09 02:
Dibenz (a,h) anthracene	1.67	1.35		mg/kg wet	81%	50 - 123	9082723	08/19/09 02:
luoranthene	1.67	1.35		mg/kg wet	81%	58 - 120	9082723	08/19/09 02:
Fluorene	1.67	1.23		mg/kg wet	74%	54 - 120	9082723	08/19/09 02:
ndeno (1,2,3-cd) pyrene	1.67	1.34		mg/kg wet	81%	50 - 122	9082723	08/19/09 02:
Naphthalene	1.67	0.977		mg/kg wet	59%	28 - 120	9082723	08/19/09 02:
Phenanthrene	1.67	1.28		mg/kg wet	77%	56 - 120	9082723	08/19/09 02:
Pyrene	1.67	1.39		mg/kg wet	84%	56 - 120	9082723	08/19/09 02:





10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number: [none]

Received:

08/07/09 08:00

# PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA	8270D							
9082723-BS1								
1-Methylnaphthalene	1.67	0.964		mg/kg wet	58%	36 - 120	9082723	08/19/09 02:26
2-Methylnaphthalene	1.67	1.01		mg/kg wet	61%	36 - 120	9082723	08/19/09 02:26
Surrogate: Terphenyl-d14	1.67	1.27			76%	18 - 120	9082723	08/19/09 02:26
Surrogate: 2-Fluorobiphenyl	1.67	1.02			61%	14 - 120	9082723	08/19/09 02:26
Surrogate: Nitrobenzene-d5	1.67	1.11			67%	17 - 120	9082723	08/19/09 02:26



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

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSH0575

Laurel Bay Housing Project Project Name: Project Number:

[none]

Received:

08/07/09 08:00

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

							_					
Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compo	ounds by EPA	Method 820	60B									
9081164-BSD1												
Benzene		51.1		ug/kg	50.0	102%	78 - 126	0.5	50	9081164		08/13/09 12:49
Ethylbenzene		51.7		ug/kg	50.0	103%	79 - 130	0.08	50	9081164		08/13/09 12:49
Naphthalene		53.2		ug/kg	50.0	106%	72 - 150	1	50	9081164		08/13/09 12:49
Toluene		49.0		ug/kg	50.0	98%	76 - 126	0.8	50	9081164		08/13/09 12:49
Xylenes, total		156		ug/kg	150	104%	80 - 130	0.8	50	9081164		08/13/09 12:49
Surrogate: 1,2-Dichloroethane-d4		51.2		ug/kg	50.0	102%	67 - 138			9081164		08/13/09 12:49
Surrogate: Dibromofluoromethane		50.6		ug/kg	50.0	101%	75 - 125			9081164		08/13/09 12:49
Surrogate: Toluene-d8		48.7		ug/kg	50.0	97%	76 - 129			9081164		08/13/09 12:49
Surrogate: 4-Bromofluorobenzene		48.7		ug/kg	50.0	97%	67 - 147			9081164		08/13/09 12:49
9081749-BSD1												
Benzene		41.8		ug/kg	50.0	84%	78 - 126	1	50	9081749		08/18/09 12:58
Ethylbenzene		47.8		ug/kg	50.0	96%	79 - 130	2	50	9081749		08/18/09 12:58
Naphthalene		55.1		ug/kg	50.0	110%	72 - 150	4	50	9081749		08/18/09 12:58
Toluene		47.2		ug/kg	50.0	94%	76 - 126	1	50	9081749		08/18/09 12:58
Xylenes, total		145		ug/kg	150	97%	80 - 130	2	50	9081749		08/18/09 12:58
Surrogate: 1,2-Dichloroethane-d4		23.2		ug/kg	25.0	93%	67 - 138			9081749		08/18/09 12:58
Surrogate: Dibromofluoromethane		24.3		ug/kg	25.0	97%	75 - 125			9081749		08/18/09 12:58
Surrogate: Toluene-d8		26.7		ug/kg	25.0	107%	76 - 129			9081749		08/18/09 12:58
Surrogate: 4-Bromofluorobenzene		23.0		ug/kg	25.0	92%	67 - 147			9081749		08/18/09 12:58
9082671-BSD1												
Benzene		49.0		ug/kg	50.0	98%	78 - 126	2	50	9082671		08/14/09 17:29
Ethylbenzene		50.4		ug/kg	50.0	101%	79 - 130	3	50	9082671		08/14/09 17:29
Naphthalene		53.7		ug/kg	50.0	107%	72 - 150	4	50	9082671		08/14/09 17:29
Toluene		48.7		ug/kg	50.0	97%	76 - 126	3	50	9082671		08/14/09 17:29
Xylenes, total		151		ug/kg	150	101%	80 - 130	3	50	9082671		08/14/09 17:29
Surrogate: 1,2-Dichloroethane-d4		51.5		ug/kg	50.0	103%	67 - 138			9082671		08/14/09 17:29
Surrogate: Dibromofluoromethane		49.6		ug/kg	50.0	99%	75 - 125			9082671		08/14/09 17:29
Surrogate: Toluene-d8		49.7		ug/kg	50.0	99%	76 - 129			9082671		08/14/09 17:29
Surrogate: 4-Bromofluorobenzene		49.4		ug/kg	50.0	99%	67 - 147			9082671		08/14/09 17:29
9082672-BSD1												
Benzene		51.7		ug/kg	50.0	103%	78 - 126	8	50	9082672		08/17/09 13:00
Ethylbenzene		51.7		ug/kg	50.0	103%	79 - 130	4	50	9082672		08/17/09 13:00
Naphthalene		57.7		ug/kg	50.0	115%	72 - 150	4	50	9082672		08/17/09 13:00
Toluene		50.2		ug/kg	50.0	100%	76 - 126	4	50	9082672		08/17/09 13:00
Xylenes, total		155		ug/kg	150	103%	80 - 130	5	50	9082672		08/17/09 13:00
Surrogate: 1,2-Dichloroethane-d4		51.2		ug/kg	50.0	102%	67 - 138			9082672		08/17/09 13:00
Surrogate: Dibromofluoromethane		52.0		ug/kg	50.0	104%	75 - 125			9082672		08/17/09 13:00
Surrogate: Toluene-d8		48.7		ug/kg	50.0	97%	76 - 129			9082672		08/17/09 13:00



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

> 10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

### PROJECT QUALITY CONTROL DATA LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Comp	oounds by EPA	Method 820	50B									
9082672-BSD1												
Surrogate: 4-Bromofluorobenzene		47.8		ug/kg	50.0	96%	67 - 147			9082672		08/17/09 13:00
Polyaromatic Hydrocarbons by	EPA 8270D											
9081773-BSD1												
Acenaphthene		1.81		mg/kg wet	1.67	108%	49 - 120	23	40	9081773		08/14/09 16:16
Acenaphthylene		1.90		mg/kg wet	1.67	114%	52 - 120	24	30	9081773		08/14/09 16:16
Anthracene		2.08	L	mg/kg wet	1.67	125%	58 - 120	20	50	9081773		08/14/09 16:16
Benzo (a) anthracene		1.98		mg/kg wet	1.67	119%	57 - 120	20	30	9081773		08/14/09 16:16
Benzo (a) pyrene		2.09	L	mg/kg wet	1.67	125%	55 - 120	20	33	9081773		08/14/09 16:16
Benzo (b) fluoranthene		1.98		mg/kg wet	1.67	119%	51 - 123	9	42	9081773		08/14/09 16:16
Benzo (g,h,i) perylene		1.90		mg/kg wet	1.67	114%	49 - 121	22	32	9081773		08/14/09 16:16
Benzo (k) fluoranthene		1.97		mg/kg wet	1.67	118%	42 - 129	31	39	9081773		08/14/09 16:16
Chrysene		1.93		mg/kg wet	1.67	116%	55 - 120	21	34	9081773		08/14/09 16:16
Dibenz (a,h) anthracene		1.94		mg/kg wet	1.67	117%	50 - 123	19	31	9081773		08/14/09 16:16
Fluoranthene		1.86		mg/kg wet	1.67	112%	58 - 120	19	35	9081773		08/14/09 16:16
Fluorene		1.85		mg/kg wet	1.67	111%	54 - 120	25	37	9081773		08/14/09 16:16
Indeno (1,2,3-cd) pyrene		1.91		mg/kg wet	1.67	115%	50 - 122	19	32	9081773		08/14/09 16:16
Naphthalene		1.47		mg/kg wet	1.67	88%	28 - 120	18	34	9081773		08/14/09 16:16
Phenanthrene		1.87		mg/kg wet	1.67	112%	56 - 120	21	32	9081773		08/14/09 16:16
Pyrene		2.08	L	mg/kg wet	1.67	124%	56 - 120	20	40	9081773		08/14/09 16:16
1-Methylnaphthalene		1.49		mg/kg wet	1.67	89%	36 - 120	21	45	9081773		08/14/09 16:16
2-Methylnaphthalene		1.52		mg/kg wet	1.67	91%	36 - 120	21	50	9081773		08/14/09 16:16
Surrogate: Terphenyl-d14		1.94		mg/kg wet	1.67	116%	18 - 120			9081773		08/14/09 16:16
Surrogate: 2-Fluorobiphenyl		1.67		mg/kg wet	1.67	100%	14 - 120			9081773		08/14/09 16:16
Surrogate: Nitrobenzene-d5		1.54		mg/kg wet	1.67	93%	17 - 120			9081773		08/14/09 16:16



10179 Highway 78 Ladson, SC 29456

Tom McElwee

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Work Order:

NSH0575

Project Name:

Received:

Laurel Bay Housing Project

Project Number:

[none] 08/07/09 08:00

## PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte Orig. Val. MS Val Q Units Spike Con  Polyaromatic Hydrocarbons by EPA 8270D  9081773-MS1  Acenaphthene ND 1.74 mg/kg dry 1.77  Acenaphthylene ND 1.75 mg/kg dry 1.77  Anthracene ND 1.92 mg/kg dry 1.77  Benzo (a) anthracene ND 1.78 mg/kg dry 1.77  Benzo (a) pyrene ND 1.90 mg/kg dry 1.77  Benzo (b) fluoranthene ND 1.89 mg/kg dry 1.77  Benzo (g,h,i) perylene ND 1.71 mg/kg dry 1.77  Benzo (k) fluoranthene ND 1.76 mg/kg dry 1.77  Chrysene ND 1.74 mg/kg dry 1.77  Chrysene	98% 99% 108% 100% 107% 96% 99%	Target Range 42 - 120 32 - 120 10 - 200 41 - 120 33 - 121 26 - 137 21 - 124 14 - 140	9081773 9081773 9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01	Analyzed Date/Time 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40
9081773-MS1           Acenaphthene         ND         1.74         mg/kg dry         1.77           Acenaphthylene         ND         1.75         mg/kg dry         1.77           Anthracene         ND         1.92         mg/kg dry         1.77           Benzo (a) anthracene         ND         1.78         mg/kg dry         1.77           Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	99% 108% 100% 107% 107% 96% 99%	32 - 120 10 - 200 41 - 120 33 - 121 26 - 137 21 - 124	9081773 9081773 9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01	08/14/09 16:40 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40
Acenaphthene         ND         1.74         mg/kg dry         1.77           Acenaphthylene         ND         1.75         mg/kg dry         1.77           Anthracene         ND         1.92         mg/kg dry         1.77           Benzo (a) anthracene         ND         1.78         mg/kg dry         1.77           Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	99% 108% 100% 107% 107% 96% 99%	32 - 120 10 - 200 41 - 120 33 - 121 26 - 137 21 - 124	9081773 9081773 9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01	08/14/09 16:40 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40
Acenaphthylene         ND         1.75         mg/kg dry         1.77           Anthracene         ND         1.92         mg/kg dry         1.77           Benzo (a) anthracene         ND         1.78         mg/kg dry         1.77           Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	99% 108% 100% 107% 107% 96% 99%	32 - 120 10 - 200 41 - 120 33 - 121 26 - 137 21 - 124	9081773 9081773 9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01	08/14/09 16:40 08/14/09 16:40 08/14/09 16:40 08/14/09 16:40
Anthracene         ND         1.92         mg/kg dry         1.77           Benzo (a) anthracene         ND         1.78         mg/kg dry         1.77           Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	108% 100% 107% 107% 96% 99%	10 - 200 41 - 120 33 - 121 26 - 137 21 - 124	9081773 9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01 NSG2706-01	08/14/09 16:40 08/14/09 16:40 08/14/09 16:40
Benzo (a) anthracene         ND         1.78         mg/kg dry         1.77           Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	100% 107% 107% 96% 99%	41 - 120 33 - 121 26 - 137 21 - 124	9081773 9081773 9081773 9081773	NSG2706-01 NSG2706-01 NSG2706-01	08/14/09 16:40 08/14/09 16:40
Benzo (a) pyrene         ND         1.90         mg/kg dry         1.77           Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	107% 107% 96% 99% 98%	33 - 121 26 - 137 21 - 124	9081773 9081773 9081773	NSG2706-01 NSG2706-01	08/14/09 16:40
Benzo (b) fluoranthene         ND         1.89         mg/kg dry         1.77           Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	107% 96% 99% 98%	26 - 137 21 - 124	9081773 9081773	NSG2706-01	
Benzo (g,h,i) perylene         ND         1.71         mg/kg dry         1.77           Benzo (k) fluoranthene         ND         1.76         mg/kg dry         1.77	96% 99% 98%	21 - 124	9081773		08/14/09 16:40
Benzo (k) fluoranthene ND 1.76 mg/kg dry 1.77	99% 98%			NSG2706-01	
	98%	14 - 140	0001773	11302700-01	08/14/09 16:40
Chrysene         ND         1.74         mg/kg dry         1.77			9081773	NSG2706-01	08/14/09 16:40
	102%	28 - 123	9081773	NSG2706-01	08/14/09 16:40
Dibenz (a,h) anthracene ND 1.81 mg/kg dry 1.77		25 - 127	9081773	NSG2706-01	08/14/09 16:40
Fluoranthene ND 1.72 mg/kg dry 1.77	97%	38 - 120	9081773	NSG2706-01	08/14/09 16:40
Fluorene ND 1.71 mg/kg dry 1.77	96%	41 - 120	9081773	NSG2706-01	08/14/09 16:40
Indeno (1,2,3-cd) pyrene ND 1.80 mg/kg dry 1.77	101%	25 - 123	9081773	NSG2706-01	08/14/09 16:40
Naphthalene ND 1.40 mg/kg dry 1.77	79%	25 - 120	9081773	NSG2706-01	08/14/09 16:40
Phenanthrene ND 1.74 mg/kg dry 1.77	98%	37 - 120	9081773	NSG2706-01	08/14/09 16:40
Pyrene ND 1.91 mg/kg dry 1.77	108%	29 - 125	9081773	NSG2706-01	08/14/09 16:40
1-Methylnaphthalene ND 1.41 mg/kg dry 1.77	80%	19 - 120	9081773	NSG2706-01	08/14/09 16:40
2-Methylnaphthalene ND 1.45 mg/kg dry 1.77	82%	11 - 120	9081773	NSG2706-01	08/14/09 16:40
Surrogate: Terphenyl-d14 1.77 mg/kg dry 1.77	100%	18 - 120	9081773	NSG2706-01	08/14/09 16:40
Surrogate: 2-Fluorobiphenyl 1.44 mg/kg dry 1.77	81%	14 - 120	9081773	NSG2706-01	08/14/09 16:40
Surrogate: Nitrobenzene-d5 1.39 mg/kg dry 1.77	78%	17 - 120	9081773	NSG2706-01	08/14/09 16:40
9082723-MS1					
Acenaphthene ND 1.52 mg/kg dry 2.01	76%	42 - 120	9082723	NSH0575-02RE	08/19/09 02:50
Acenaphthylene ND 1.51 mg/kg dry 2.01	75%	32 - 120	9082723	NSH0575-02RE	08/19/09 02:50
Anthracene ND 1.78 mg/kg dry 2.01	89%	10 - 200	9082723	NSH0575-02RE	08/19/09 02:50
Benzo (a) anthracene ND 1.76 mg/kg dry 2.01	88%	41 - 120	9082723	1 NSH0575-02RE	08/19/09 02:50
Benzo (a) pyrene ND 1.71 mg/kg dry 2.01	85%	33 - 121	9082723	1 NSH0575-02RE	08/19/09 02:50
Benzo (b) fluoranthene ND 1.74 mg/kg dry 2.01	87%	26 - 137	9082723	1 NSH0575-02RE	08/19/09 02:50
Benzo (g,h,i) perylene         ND         1.56         mg/kg dry         2.01	78%	21 - 124	9082723	1 NSH0575-02RE	08/19/09 02:50
Benzo (k) fluoranthene ND 1.53 mg/kg dry 2.01	76%	14 - 140	9082723	1 NSH0575-02RE	08/19/09 02:50
Chrysene         ND         1.66         mg/kg dry         2.01	83%	28 - 123	9082723	1 NSH0575-02RE 1	08/19/09 02:50



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

08/07/09 08:00

## PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

			IVIA	rrix Spike -	Cont.					
Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by	EPA 8270D							• •		
9082723-MS1										
Dibenz (a,h) anthracene	ND	1.64		mg/kg dry	2.01	82%	25 - 127	9082723	NSH0575-02RE 1	08/19/09 02:50
Fluoranthene	0.134	1.83		mg/kg dry	2.01	84%	38 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Fluorene	ND	1.62		mg/kg dry	2.01	81%	41 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Indeno (1,2,3-cd) pyrene	ND	1.66		mg/kg dry	2.01	83%	25 - 123	9082723	NSH0575-02RE 1	08/19/09 02:50
Naphthalene	ND	1.28		mg/kg dry	2.01	64%	25 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Phenanthrene	0.138	1.85		mg/kg dry	2.01	85%	37 - 120	9082723	NSH0575-02RE I	08/19/09 02:50
Pyrene	0.154	1.87		mg/kg dry	2.01	85%	29 - 125	9082723	NSH0575-02RE 1	08/19/09 02:50
1-Methylnaphthalene	0.0997	1.45		mg/kg dry	2.01	67%	19 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
2-Methylnaphthalene	0.125	1.59		mg/kg dry	2.01	73%	11 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Surrogate: Terphenyl-d14		1.52		mg/kg dry	2.01	76%	18 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Surrogate: 2-Fluorobiphenyl		1.25		mg/kg dry	2.01	62%	14 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50
Surrogate: Nitrobenzene-d5		1.30		mg/kg dry	2.01	65%	17 - 120	9082723	NSH0575-02RE 1	08/19/09 02:50



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

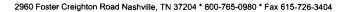
Project Number:

[none]

Received: 08/07/09 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by	EPA 8270D											
9081773-MSD1												
Acenaphthene	ND	1.71		mg/kg dry	1.82	94%	42 - 120	2	40	9081773	NSG2706-01	08/14/09 17:03
Acenaphthylene	ND	1.75		mg/kg dry	1.82	96%	32 - 120	0.1	30	9081773	NSG2706-01	08/14/09 17:03
Anthracene	ND	1.91		mg/kg dry	1.82	105%	10 - 200	0.4	50	9081773	NSG2706-01	08/14/09 17:03
Benzo (a) anthracene	ND	1.82		mg/kg dry	1.82	100%	41 - 120	2	30	9081773	NSG2706-01	08/14/09 17:03
Benzo (a) pyrene	ND	1.87		mg/kg dry	1.82	102%	33 - 121	2	33	9081773	NSG2706-01	08/14/09 17:03
Benzo (b) fluoranthene	ND	2.03		mg/kg dry	1.82	111%	26 - 137	7	42	9081773	NSG2706-01	08/14/09 17:03
Benzo (g,h,i) perylene	ND	1.74		mg/kg dry	1.82	95%	21 - 124	2	32	9081773	NSG2706-01	08/14/09 17:03
Benzo (k) fluoranthene	ND	1.59		mg/kg dry	1.82	87%	14 - 140	10	39	9081773	NSG2706-01	08/14/09 17:03
Chrysene	ND	1.73		mg/kg dry	1.82	95%	28 - 123	0.5	34	9081773	NSG2706-01	08/14/09 17:03
Dibenz (a,h) anthracene	ND	1.82		mg/kg dry	1.82	100%	25 - 127	0.6	31	9081773	NSG2706-01	08/14/09 17:03
Fluoranthene	ND	1.72		mg/kg dry	1.82	94%	38 - 120	0.06	35	9081773	NSG2706-01	08/14/09 17:03
Fluorene	ND	1.72		mg/kg dry	1.82	94%	41 - 120	0.8	37	9081773	NSG2706-01	08/14/09 17:03
Indeno (1,2,3-cd) pyrene	ND	1.78		mg/kg dry	1.82	98%	25 - 123	1	32	9081773	NSG2706-01	08/14/09 17:03
Naphthalene	ND	1.36		mg/kg dry	1.82	75%	25 - 120	3	42	9081773	NSG2706-01	08/14/09 17:03
Phenanthrene	ND	1.71		mg/kg dry	1.82	94%	37 - 120	2	32	9081773	NSG2706-01	08/14/09 17:03
Pyrene	ND	1.90		mg/kg dry	1.82	104%	29 - 125	0.6	40	9081773	NSG2706-01	08/14/09 17:03
1-Methylnaphthalene	ND	1.40		mg/kg dry	1.82	77%	19 - 120	0.9	45	9081773	NSG2706-01	08/14/09 17:03
2-Methylnaphthalene	ND	1.41		mg/kg dry	1.82	77%	11 - 120	3	50	9081773	NSG2706-01	08/14/09 17:03
Surrogate: Terphenyl-d14		1.78		mg/kg dry	1.82	98%	18 - 120			9081773	NSG2706-01	08/14/09 17:03
Surrogate: 2-Fluorobiphenyl		1.42		mg/kg dry	1.82	78%	14 - 120			9081773	NSG2706-01	08/14/09 17:03
Surrogate: Nitrobenzene-d5		1.39		mg/kg dry	1.82	76%	17 - 120			9081773	NSG2706-01	08/14/09 17:03
9082723-MSD1												
Acenaphthene	ND	1.45		mg/kg dry	1.99	73%	42 - 120	5	40	9082723	NSH0575-02R E1	08/19/09 03:14
Acenaphthylene	ND	1.47		mg/kg dry	1.99	74%	32 - 120	3	30	9082723	NSH0575-02R E1	08/19/09 03:14
Anthracene	ND	1.67		mg/kg dry	1.99	84%	10 - 200	7	50	9082723	NSH0575-02R E1	08/19/09 03:14
Benzo (a) anthracene	ND	1.57		mg/kg dry	1.99	79%	41 - 120	11	30	9082723	NSH0575-02R E1	08/19/09 03:14
Benzo (a) pyrene	ND	1.59		mg/kg dry	1.99	80%	33 - 121	7	33	9082723	NSH0575-02R	08/19/09 03:14
Benzo (b) fluoranthene	ND	1.64		mg/kg dry	1.99	82%	26 - 137	6	42	9082723	E1 NSH0575-02R	08/19/09 03:14
Benzo (g,h,i) perylene	ND	1.50		mg/kg dry	1.99	75%	21 - 124	4	32	9082723	E1 NSH0575-02R	08/19/09 03:14
Benzo (k) fluoranthene	ND	1.42		mg/kg dry	1.99	71%	14 - 140	7	39	9082723	E1 NSH0575-02R	08/19/09 03:14
Chrysene	ND	1.50		mg/kg dry	1.99	75%	28 - 123	10	34	9082723	E1 NSH0575-02R	08/19/09 03:14
Dibenz (a,h) anthracene	ND	1.55		mg/kg dry	1.99	78%	25 - 127	5	31	9082723	E1 NSH0575-02R	08/19/09 03:14
Fluoranthene	0.134	1.67		mg/kg dry	1.99	77%	38 - 120	9	35	9082723	E1 NSH0575-02R E1	08/19/09 03:14





10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

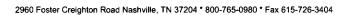
[none]

Received:

08/07/09 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Límit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by	y EPA 8270D											
9082723-MSD1												
Fluorene	ND	1.53		mg/kg dry	1.99	77%	41 - 120	6	37	9082723	NSH0575-02R E1	08/19/09 03:14
Indeno (1,2,3-cd) pyrene	ND	1.53		mg/kg dry	1.99	77%	25 - 123	8	32	9082723	NSH0575-02R E1	08/19/09 03:14
Naphthalene	ND	1.13		mg/kg dry	1.99	57%	25 - 120	13	42	9082723	NSH0575-02R E1	08/19/09 03:14
Phenanthrene	0.138	1.66		mg/kg dry	1.99	77%	37 - 120	11	32	9082723	NSH0575-02R E1	08/19/09 03:14
Pyrene	0.154	1.77		mg/kg dry	1.99	81%	29 - 125	5	40	9082723	NSH0575-02R E1	08/19/09 03:14
1-Methylnaphthalene	0.0997	1.25		mg/kg dry	1.99	58%	19 - 120	15	45	9082723	NSH0575-02R E1	08/19/09 03:14
2-Methylnaphthalene	0.125	1.32		mg/kg dry	1.99	60%	11 - 120	19	50	9082723	NSH0575-02R E1	08/19/09 03:14
Surrogate: Terphenyl-d14		1.51		mg/kg dry	1.99	76%	18 - 120			9082723	NSH0575-02R E1	08/19/09 03:14
Surrogate: 2-Fluorobiphenyl		1.22		mg/kg dry	1.99	61%	14 - 120			9082723	NSH0575-02R E1	08/19/09 03:14
Surrogate: Nitrobenzene-d5		1.25		mg/kg dry	1.99	63%	17 - 120			9082723	NSH0575-02R E1	08/19/09 03:14





10179 Highway 78

Ladson, SC 29456

Ladson, SC 294
Tom McElwee

Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

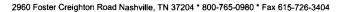
08/07/09 08:00

#### **CERTIFICATION SUMMARY**

#### TestAmerica Nashville

Attn

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





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

10179 Highway 78 Ladson, SC 29456 Work Order:

NSH0575

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

08/07/09 08:00

Tom McElwee

Attn

Received:

#### **DATA QUALIFIERS AND DEFINITIONS**

B Analyte was detected	in the associated Method Blank.
------------------------	---------------------------------

**CF2** Confirmatory analysis was past holding time.

**CF6** Results confirmed by reanalysis.

J Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).

Concentrations within this range are estimated.

L Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not

detected, data not impacted.

L1 Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.

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

**ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

ND Not detected at the reporting limit (or method detection limit if shown)

#### **METHOD MODIFICATION NOTES**



Nashville, TN

### **COOLER RECEIP**



NSH0575

Cooler Received/Opened On_08/07/09 @ 08:00	
1. Tracking #(last 4 digits, FedE:	
Courier:FED-EX	
2. Temperature of rep. sample or temp blank when opened: 5. — Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO(A
4. Were custody seals on outside of cooler?	ES.NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	168NONA
6. Were custody papers inside cooler?	YESNONA
I certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers:  YES  NO and Intact	YESNO (NA)
Were these signed and dated correctly?	YESNO NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts. Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (Ce) Ice-pack Ice (direct contact) Dry Ice	Other None
10. Did all containers arrive in good condition (unbroken)?	(FS)NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	ESNUNA
13a. Were VOA vials received	(ES)NONA
b. Was there any observable headspace present in any VOA vial?	YES. NO. NA
14. Was there a Trip Blank in this cooler? YES. NO NA If multiple coolers, sequen	ce #
I certify that I unloaded the cooler and answered questions 7-14 (intial)	(W)
15a. On pres'd bottles, did pH test strips suggest preservation reached the согтесt pH level?	YESNO.NA
b. Did the bottle labels indicate that the correct preservatives were used	XES. NONA
16. Was residual chlorine present?	YESNOMA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	_@_
17. Were custody papers properly filled out (ink, signed, etc)?	ESNONA
18. Did you sign the custody papers in the appropriate place?	ESNONA
19. Were correct containers used for the analysis requested?	ESNONA
20. Was sufficient amount of sample sent in each container?	.NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	
I certify that I attached a label with the unique LIMS number to each container (intial)	
21. Were there Non-Conformance issues at login? YES. NO Was a PIPE generated? YES.	.NO).#

TH. LEADER IN ENVIRONMENTA		Nashville 2960 Fost Nashville	er Cre	ighto	n				Free	: 80	5-72( 0-76( 5-72(	5-09	BO							meth		this wo	ng the p ork bein s?	•	•				
Client Name/Account #:	EEG # 2449						_																Compli	ance M	onitoria	ng?	Ye	s	No
Address:	10179 Highway	78																					Enfor	cement	Action	?	Ye	8	No
City/State/Zip:	Ladson, SC 29	156																Site	State:	sc		_							
Project Manager:	Tom McElwee	mail: mcelw	ree@ee	ginc.n	net														PO#:		08	72	9						
Telephone Number:	843.412.2097					F	ıx No.	: <i>K</i>	4	3-	- 6	77	9.	-0	74/6	9/	T	A Qu	ote #:			-	,						
Sampler Name: (Print)	PRA	H S	44	w							-					- /		Proje	ct ID:	Laure	el Bay I	lousing	g Projec	at .					
Sampler Signature:	B(1)						7,	7				7				-		_	ect#:										
	1					ſ	30	Pro	serva	ative		री	_	M	atrix		Т						nalyze	For:	==				7
Sample ID/Description 1423 Albatross 1426 Albatross 1428 Albatross 1431 Dove 1440 Dove 1447 Dove 1443 Dove 1441 Dove 1443 Dove 1443 Dove	8/3/09 8/3/09 8/3/09 8/4/09 8/4/09 8/4/09	0935- 0935- 0935- 1330 1345- 0930 1145- 1555- 1515-	5 5	qeso X X X X X X X X X X X X X X X X X X X	Сотрозіте	Field Filtered	ATTENDED TO TOTAL TOTAL TREATMENT TO THE COLUMN TO THE COLUMN TOTAL TREATMENT TO THE COLUMN TO THE C		NaOH ( Orange Label)	.   _		Other (Specify) Math	Groundwater	Drinking Water	Sludge	N X X X X X X X X X X X X X X X X X X X		UN WWW WWW WW BTEX + Napth - 8260	PUPPLANN PAH-8270D					NS	nos	75	- C/ 02 03 04 05 05 07 08		RUSH TAT (Pre-Schedule
Special Instructions:	<u> </u>	L	<u> </u>					44		Ь.	لمل	L								Labo	ratory	Comm	ents:	٠	<u> </u>	<del></del>	Т-		
Relinquished by:	8/G/	09	Tin 190	20	Receiv	ved by	<u> </u>	tmeric	-X	ent:					Pate	FEC		Time			Temp	eratur	e Upon of Head	Receip	* <i>3</i> '	ĺc			Y

# ATTACHMENT A



# **NON-HAZARDOUS MANIFEST**

CVARMS (Form designed for use on elite (12-pitch) typewriter.) Generator's US EPA ID No. 2. Page 1 NON-HAZARDOUS MANIFEST of 1 Generator's Name and Mailing Address A. Manifest Number 10885467 MCAS, Beaufort Laurel Bay Housin Beaufort SC 2990 WMNA B. State Generator's ID Generator's Phone 843 228-8460 Transporter 1 Company Name US EPA ID Number C. State Transporter's ID D. Transporter's Phone 843 879-041 EEG, Inc. Transporter 2 Company Name US EPA ID Number E. State Transporter's ID F. Transporter's Phone G. State Facility's ID 9. Designated Facility Name and Site Address 10. US EPA ID Number HICKORY HILL LANDFILL H. Facility's Phone ROUTE 1, BOX 121 RIDGELAND SC 299 843 987-4643 11. Description of Waste Materials 12. Containers 13. Total Misc. Comments \*Heating Oil Tank filled with Sand 102655SC 0.0.1 WM Profile # b WM Profile # WM Profile # d. WM Profile # K. Disposal Location Additional Descriptions for Materials Listed Above Cell Landfill Solidification Level Bio Remediation Special Handling Instructions and Additional Information 3 thou DOUEV 1442 DOUR-21 428 DOUR EMERGENCY CONTACT: Purchase Order # GENERATOR'S CERTIFICATION: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations. Month Day Year Printed/Typed Name Signature "On behalf of 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Signature Month Day Year mes Transporter 2 Acknowledgement of Receipt of Materials 18. Printed/Typed Name Signature Month Day Year Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above. Facitilty Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest Printed/Typed Name Day Year

# Appendix C Laboratory Analytical Report - Initial Groundwater



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

Client: AECOM - Resolution Consultants

Laboratory ID: QF17014-001

Description: BEALB1440TW01WG20150616

Date Sampled: 06/16/2015 0955 Date Received: 06/17/2015

Matrix: Aqueous

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260B	5	06/25/2015 0423 PMM2		78064

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	2.3	U	25	2.3	1.1	ug/L	1
Ethylbenzene	100-41-4	8260B	11	J	25	2.6	1.1	ug/L	1
Naphthalene	91-20-3	8260B	70		25	4.8	0.70	ug/L	1
Toluene	108-88-3	8260B	2.4	U	25	2.4	1.2	ug/L	1
Xylenes (total)	1330-20-7	8260B	9.7	J	25	2.9	0.95	ug/L	1

Run 1 A Q % Recovery	cceptance Limits
108	75-120
87	70-120
96	85-120
86	85-115
	Q % Recovery 108 87 96

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

 $J = Estimated result < PQL and <math>\geq MDL$ Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

S = MS/MSD failure

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Laboratory ID: QF17014-001

Matrix: Aqueous

Description: BEALB1440TW01WG20150616 Date Sampled: 06/16/2015 0955

Date Received: 06/17/2015

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date Batch
1	3520C	8270D (SIM)	1	06/22/2015 1058 RBH	06/19/2015 1430 77693

	CAS	Analytical					
Parameter	Number	Method	Result	Q	LOQ	LOD	DL Units Run
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.21		0.20	0.040	0.019 ug/L 1
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.17	J	0.20	0.040	0.019 ug/L 1
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.072	J	0.20	0.040	0.024 ug/L 1
Chrysene	218-01-9	8270D (SIM)	0.42		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		139	15-139
Fluoranthene-d10		65	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 N = Recovery is out of criteria L = LCS/LCSD failure

 $J = Estimated result < PQL and <math>\geq MDL$ Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

# Appendix D Laboratory Analytical Report — Permanent Well Groundwater



#### Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SL09005-006

Description: BEALB1440MW01WG20171207

Date Sampled:12/07/2017 1415

Matrix: Aqueous

Date Received: 12/09/2017

Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch 5030B 8260B 12/13/2017 1322 JJG 59492

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 1
Ethylbenzene	100-41-4	8260B	1.6	1.0	0.80	0.40	ug/L 1
Naphthalene	91-20-3	8260B	3.4	1.0	0.80	0.40	ug/L 1
Toluene	108-88-3	8260B	0.80 U	1.0	0.80	0.40	ug/L 1
Xylenes (total)	1330-20-7	8260B	3.0	1.0	0.80	0.40	ug/L 1

Run 1 Acceptance Surrogate Q % Recovery Limits Bromofluorobenzene 99 85-114 Dibromofluoromethane 102 80-119 97 1,2-Dichloroethane-d4 81-118 Toluene-d8 105 89-112

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  $\geq$  DL Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Shealy Environmental Services, Inc.

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

### Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Laboratory ID: SL09005-006

Description: BEALB1440MW01WG20171207

Matrix: Aqueous

Date Sampled:12/07/2017 1415 Date Received: 12/09/2017

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

 1
 3520C
 8270D
 1
 12/28/2017 1307 CMP2
 12/13/2017 1528 59419

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	% Recovery	Limits
Nitrobenzene-d5		46	44-120
2-Fluorobiphenyl		44	44-119
Terphenyl-d14		51	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  $\geq DL$ 

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

Shealy Environmental Services, Inc.

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

# Appendix E Laboratory Analytical Report - Vapor



#### **ALS ENVIRONMENTAL**

#### RESULTS OF ANALYSIS

Page 1 of 1

Client:AECOMALS Project ID: P1503199Client Sample ID:BEALB 1440 SG01 GS20150729ALS Sample ID: P1503199-001

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: 8/11/15

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)

Test Notes:

Container ID: SC01478

Initial Pressure (psig): -2.06 Final Pressure (psig): 3.71

Canister Dilution Factor: 1.46

CAS#	Compound	Result µg/m³	LOQ μg/m³	LOD μg/m³	$\frac{MDL}{\mu g/m^3}$	Data Qualifier
71-43-2	Benzene	6.6	7.3	6.6	2.3	U
108-88-3	Toluene	48	7.3	6.4	2.5	
100-41-4	Ethylbenzene	22	7.3	6.4	2.3	
179601-23-1	m,p-Xylenes	96	15	13	4.4	
95-47-6	o-Xylene	30	7.3	6.1	2.2	
91-20-3	Naphthalene	7.2	7.3	6.4	2.6	J

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

# Appendix 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 *	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 Fur	ther 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 Aibatross 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

ZI RE

Department of Defense Corrective Action Section

Cc:

Russell Berry, EQC Region 8

Shawn Dolan, Resolution Consultants Bryan Beck, NAVFAC MIDLANT