**SUMMARY REPORT**
**150 DAHLIA DRIVE (FORMERLY 565 DAHLIA DRIVE)**
**LAUREL BAY MILITARY HOUSING AREA**
**MARINE CORPS AIR STATION BEAUFORT**
**BEAUFORT, SC**

**Revision: 0**
**Prepared for:**

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

**and**


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

**JUNE 2021**

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**Prepared by:**


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

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

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## Tables



## Appendices

## 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 |
| QAPP | Quality Assurance Program Plan |
| RBSL | risk-based screening level |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| Site | LBMH area at MCAS Beaufort, South Carolina |
| UST | underground storage tank |
| VISL | vapor intrusion screening level |

## 1.0 INTRODUCTION

The CDM - AECOM Multimedia Joint Venture (JV) was contracted by the Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC Mid-Lant) to provide reporting services for the heating oil underground storage tanks (USTs) located in Laurel Bay Military Housing (LBMH) area at the Marine Corps Air Station (MCAS) Beaufort, South Carolina (Site). This work has been awarded under Contract Task Order (CTO) WE52 of the Indefinite Delivery, Indefinite Quantity (IDIQ) Multimedia Environmental Compliance Contract (Contract No. N62470-14-D-9016).

As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample nomenclature and reporting documents.

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 150 Dahlia Drive (Formerly 565 Dahlia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil 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 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.

## 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 results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion and the necessity for an investigation associated with this media. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

## 2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 150 Dahlia Drive (Formerly 565 Dahlia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 565 Dahlia Drive* (MCAS Beaufort, 2007). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

### 2.1 UST Removal and Soil Sampling

On May 16, 2006, a single 280 gallon heating oil UST was removed from the front yard at 150 Dahlia Drive (Formerly 565 Dahlia Drive). The UST was removed, cleaned, and shipped offsite for recycling. 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 is not included and a single soil sample was collected. 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 150 Dahlia Drive (Formerly 565 Dahlia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated October 7, 2008, SCDHEC requested an IGWA for 150 Dahlia Drive (Formerly 565 Dahlia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

## 2.3 Groundwater Sampling

On July 30, 2008, a temporary monitoring well was installed at 150 Dahlia Drive (Formerly 565 Dahlia Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report November and December 2015* (Resolution Consultants, 2008).

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 (SCDHEC, 2016). Field forms are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report November and December 2015* (Resolution Consultants, 2008).

### 2.4 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 150 Dahlia Drive (Formerly 565 Dahlia Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), 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.

## 3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 150 Dahlia Drive (Formerly 565 Dahlia Drive). This NFA determination was obtained in a letter dated December 8, 2008. SCDHEC's NFA letter is provided in Appendix D.

## 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2007. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 565 Dahlia Drive, Laurel Bay Military Housing Area*, August 2007.

Resolution Consultants, 2008. *Investigation of Ground Water at Leaking Heating Oil UST Sites Report for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, November 2008.

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.

# Tables

**Table 1**
**Laboratory Analytical Results - Soil**
**150 Dahlia Drive (Formerly 565 Dahlia Drive)**
**Laurel Bay Military Housing Area**
**Marine Corps Air Station Beaufort**
**Beaufort, South Carolina**

| Constituent | SCDHEC RBSLs [1] | Results Sample Collected 05/16/06 |
|---|---|---|
| **Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)** | | |
| Benzene | 0.003 | ND |
| Ethylbenzene | 1.15 | ND |
| Naphthalene | 0.036 | ND |
| Toluene | 0.627 | ND |
| Xylenes, Total | 13.01 | ND |
| **Semivolatile Organic Compounds Analyzed by EPA Method 8270C (mg/kg)** | | |
| Benzo(a)anthracene | 0.66 | **0.192** |
| Benzo(b)fluoranthene | 0.66 | **0.375** |
| Benzo(k)fluoranthene | 0.66 | **0.344** |
| Chrysene | 0.66 | **0.228** |
| Dibenz(a,h)anthracene | 0.66 | **0.0912** |

**Notes:**

[1] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 and 1.1 (SCDHEC, May 2001 and SCDHEC, February 2011) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

**Table 2**
**Laboratory Analytical Results - Groundwater**
**150 Dahlia Drive (Formerly 565 Dahlia Drive)**
**Laurel Bay Military Housing Area**
**Marine Corps Air Station Beaufort**
**Beaufort, South Carolina**

| Constituent | SCDHEC RBSLs [1] | Site-Specific Groundwater VISLs (µg/L)[2] | Results Sample Collected 07/30/08 |
|---|---|---|---|
| **Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)** | | | |
| Benzene | 5 | 16.24 | ND |
| Ethylbenzene | 700 | 45.95 | ND |
| Naphthalene | 25 | 29.33 | ND |
| Toluene | 1000 | 105,445 | ND |
| Xylenes, Total | 10,000 | 2,133 | ND |
| **Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)** | | | |
| Benzo(a)anthracene | 10 | NA | ND |
| Benzo(b)fluoranthene | 10 | NA | ND |
| Benzo(k)fluoranthene | 10 | NA | ND |
| Chrysene | 10 | NA | ND |
| Dibenz(a,h)anthracene | 10 | NA | ND |

**Notes:**

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

[2] Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of $1x10^{-6}$, a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

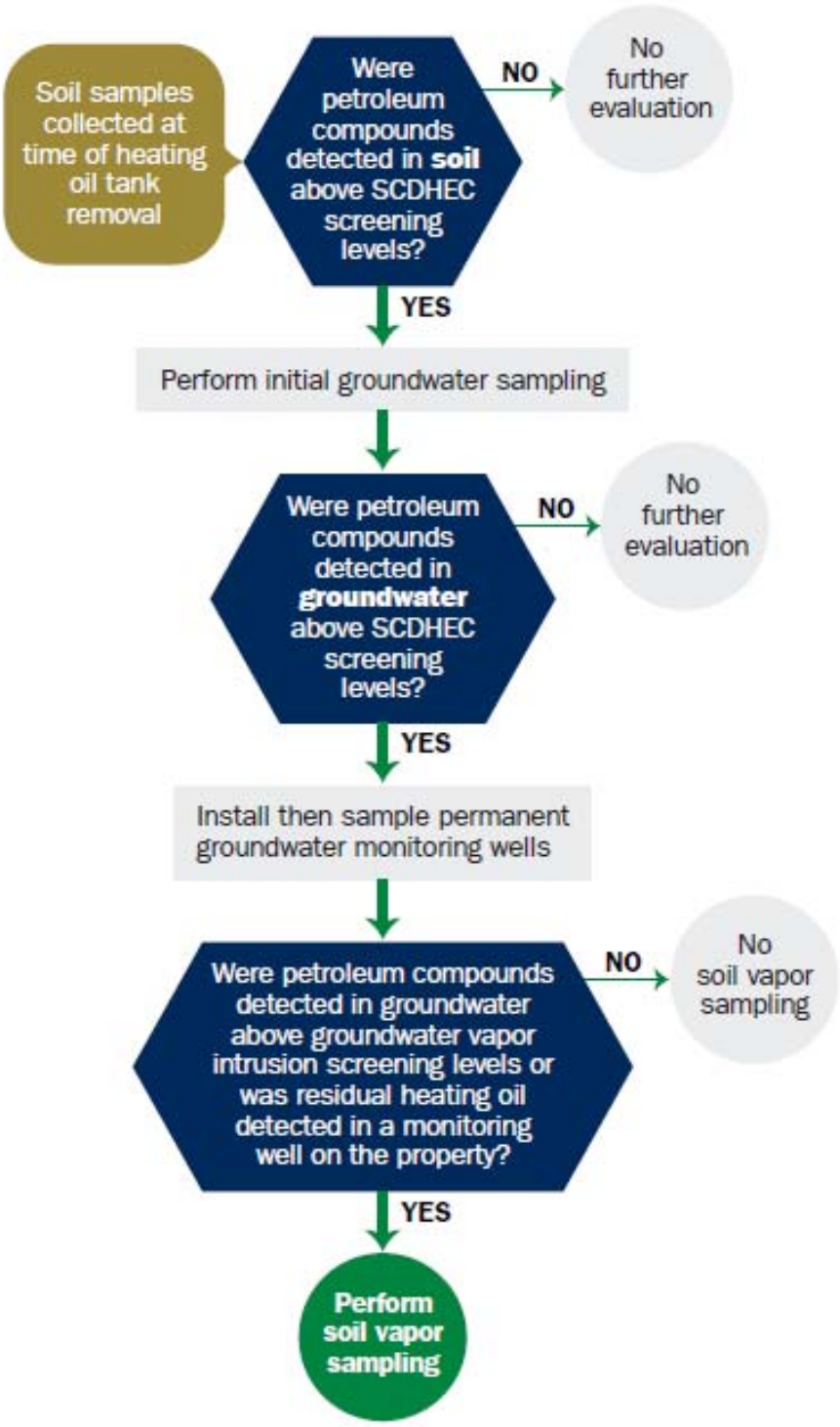
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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

CDM - AECOM
Multimedia Joint Venture




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

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

CDM - AECOM
Multimedia Joint Venture

565 Dahlia

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

| Date Received |
| --- |
| State Use Only |

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

RECEIVED
AUG 15 2007
Water Monitoring, Assessment & Protection Division

## I. OWNERSHIP OF UST (S)

Beaufort Military Complex Family Housing
Owner Name (Corporation, Individual, Public Agency, Other)

1510 Laurel Bay Blvd.
Mailing Address

Beaufort | SC | 29906
City | State | Zip Code

843 | 379-3305 | Kyle Broadfoot
Area Code | Telephone Number | Contact Person

## II. SITE IDENTIFICATION AND LOCATION

N/A
Permit I.D. #

Actus Lend Lease Construction
Facility Name or Company Site Identifier

1510 Laurel Bay Blvd
Street Address or State Road (as applicable)

Beaufort, SC | 29906 | Beaufort
City | ZIP | County

Attachment 2

## III. INSURANCE INFORMATION

### Insurance Statement

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

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

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

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

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

**And**

I **do/do not** (circle one) wish to participate in the Superb Program.

## IV. CERTIFICATION (To be signed by the UST owner/operator.)

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

_____
Name (Type or print.)

_____
Signature

### To be completed by Notary Public:

Sworn before me this _____ day of_____, 20___.

_____
(Name)

Notary Public for the state of_____,
*Please affix State seal if you are commissioned outside South Carolina*

## V. UST INFORMATION

| | Tank 1 | Tank 2 | Tank 3 | Tank 4 | Tank 5 | Tank 6 |
|---|---|---|---|---|---|---|
| A. Product...(ex. Gas, Kerosene)..... | #2 DIESEL | | | | | |
| B. Capacity..(ex. 1k, 2k)..... (APPROX.) | 350g | | | | | |
| C. Age..... | | | | | | |
| D. Construction Material..(ex. Steel, FRP)..... | Steel | | | | | |
| E. Month/Year of Last Use..... | | | | | | |
| F. Depth (ft.) To Base of Tank..... | | | | | | |
| G. Spill Prevention Equipment Y/N..... | N | | | | | |
| H. Overfill Prevention Equipment Y/N..... | N | | | | | |
| I. Method of Closure (Removed/Filled)..... | Removed | | | | | |
| J. Date Tanks Removed/Filled..... | 5/16/06 | | | | | |
| K. Visible Corrosion or Pitting Y/N..... | N | | | | | |
| L. Visible Holes Y/N..... | N | | | | | |

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

Recycling - Scrap Steel

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

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

## VI. PIPING INFORMATION

| | Tank 1 | Tank 2 | Tank 3 | Tank 4 | Tank 5 | Tank 6 |
|---|---|---|---|---|---|---|
| A. Construction Material..(ex. Steel, FRP)..... | Steel | | | | | |
| B. Distance from UST to Dispenser..... | N/A | | | | | |
| C. Number of Dispensers..... | -0- | | | | | |
| D. Type of System Pressure or Suction..... | Electric Pump | | | | | |
| E. Was Piping Removed from the Ground? Y/N | N | | | | | |
| F. Visible Corrosion or Pitting Y/N..... | N | | | | | |
| G. Visible Holes Y/N..... | | | | | | |
| H. Age..... | | | | | | |

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

## VII. BRIEF SITE DESCRIPTION AND HISTORY

Home Heating Oil TANK - RESIDENTIAL

## VIII. SITE CONDITIONS

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

## IX. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number DW: 84009002

B.

| Sample # | Location | Sample Type (Soil/Water) | Soil Type (Sand/Clay) | Depth* | Date/Time of Collection | Collected by | OVA # |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| 1 | | S | | | | A. MANUCY | ND |
| 2 | | S | | | | A. MANUCY | ND |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
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| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

* = Depth Below the Surrounding Land Surface

## X. SAMPLING METHODOLOGY

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

EPA Method 8260 B Volatile Organic Compounds
- Preservative: 2 EA Sodium Bisulfate 1 EA
EPA Method 8270 Poly Aromatic Hydrocarbons
- No Preservative

One (1) Sidewall and One (1) Bottom Sample were secured from tank excavation Samples were stored and shipped in an insulated cooler w/ ice.

## XI. RECEPTORS

| | Yes | No |
|---|---|---|
| A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?<br><br>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?<br><br>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?<br><br>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?<br><br>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?<br><br>If yes, indicate the area of contaminated soil on the site map. | | ✓ |


565 Dahlia

## SUMMARY OF ANALYSIS RESULTS N/A

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

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

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

SUMMARY OF ANALYSIS RESULTS (cont'd) N/A

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

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

## 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)

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

May 31, 2006

Client: Environmental Projects (2411)
P. O. Box 1096
Mt. Pleasant, SC 29464
Attn: John Mahoney

Work Order: NPE2474
Project Name: Laurel Bay
Project Nbr: EP 2362
P/O Nbr:
Date Received: 05/17/06

| SAMPLE IDENTIFICATION | LAB NUMBER | COLLECTION DATE AND TIME |
|---|---|---|
| 565 Dahlia | NPE2474-01 | 05/16/06 09:00 |

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 accredidation.



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



Report Approved By:

Jessica Vickers
Senior Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | Environmental Projects (2411) | Work Order: | NPE2474 |
| | P. O. Box 1096 | Project Name: | Laurel Bay |
| | Mt. Pleasant, SC 29464 | Project Number: | EP 2362 |
| Attn | John Mahoney | Received: | 05/17/06 08:00 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NPE2474-01 (565 Dahlia - Soil) Sampled: 05/16/06 09:00** | | | | | | | | |
| General Chemistry Parameters | | | | | | | | |
| % Dry Solids | **94.2** | | % | 0.500 | 1 | 05/24/06 09:15 | SW-846 | 6054674 |
| Selected Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Benzene | ND | | mg/kg | 0.00207 | 1 | 05/23/06 03:05 | SW846 8260B | 6052727 |
| Ethylbenzene | ND | | mg/kg | 0.00207 | 1 | 05/23/06 03:05 | SW846 8260B | 6052727 |
| Naphthalene | ND | | mg/kg | 0.00519 | 1 | 05/23/06 03:05 | SW846 8260B | 6052727 |
| Toluene | ND | | mg/kg | 0.00207 | 1 | 05/23/06 03:05 | SW846 8260B | 6052727 |
| Xylenes, total | ND | | mg/kg | 0.00519 | 1 | 05/23/06 03:05 | SW846 8260B | 6052727 |
| *Surr: 1,2-Dichloroethane-d4 (72-125%)* | *114 %* | | | | | *05/23/06 03:05* | *SW846 8260B* | *6052727* |
| *Surr: Dibromofluoromethane (73-124%)* | *86 %* | | | | | *05/23/06 03:05* | *SW846 8260B* | *6052727* |
| *Surr: Toluene-d8 (80-124%)* | *104 %* | | | | | *05/23/06 03:05* | *SW846 8260B* | *6052727* |
| *Surr: 4-Bromofluorobenzene (25-185%)* | *116 %* | | | | | *05/23/06 03:05* | *SW846 8260B* | *6052727* |
| Polyaromatic Hydrocarbons by EPA 8270C | | | | | | | | |
| Acenaphthene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Acenaphthylene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Anthracene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Benzo (a) anthracene | **0.192** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Benzo (a) pyrene | **0.217** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Benzo (b) fluoranthene | **0.375** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Benzo (g,h,i) perylene | **0.0771** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Benzo (k) fluoranthene | **0.344** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Chrysene | **0.228** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Dibenz (a,h) anthracene | **0.0912** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Fluoranthene | **0.616** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Fluorene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Indeno (1,2,3-cd) pyrene | **0.120** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Naphthalene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Phenanthrene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| Pyrene | **1.58** | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| 1-Methylnaphthalene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| 2-Methylnaphthalene | ND | | mg/kg | 0.0662 | 1 | 05/21/06 18:14 | SW846 8270C | 6053769 |
| *Surr: Terphenyl-d14 (41-117%)* | *56 %* | | | | | *05/21/06 18:14* | *SW846 8270C* | *6053769* |
| *Surr: 2-Fluorobiphenyl (35-106%)* | *70 %* | | | | | *05/21/06 18:14* | *SW846 8270C* | *6053769* |
| *Surr: Nitrobenzene-d5 (10-153%)* | *58 %* | | | | | *05/21/06 18:14* | *SW846 8270C* | *6053769* |

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

Client: Environmental Projects (2411)
P. O. Box 1096
Mt. Pleasant, SC 29464
Attn: John Mahoney

Work Order: NPE2474
Project Name: Laurel Bay
Project Number: EP 2362
Received: 05/17/06 08:00

## SAMPLE EXTRACTION DATA

| Parameter | Batch | Lab Number | Wt/Vol Extracted | Extracted Vol | Date | Analyst | Extraction Method |
|---|---|---|---|---|---|---|---|
| Polyaromatic Hydrocarbons by EPA 8270C | | | | | | | |
| SW846 8270C | 6053769 | NPE2474-01 | 30.36 | 1.00 | 05/20/06 07:30 | ACB | EPA 3550B |
| Selected Volatile Organic Compounds by EPA Method 8260B | | | | | | | |
| SW846 8260B | 6052727 | NPE2474-01 | 4.82 | 5.00 | 05/16/06 09:00 | SNN | EPA 5035 |

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| | | | |
|---|---|---|---|
| Client | Environmental Projects (2411) | Work Order: | NPE2474 |
| | P. O. Box 1096 | Project Name: | Laurel Bay |
| | Mt. Pleasant, SC 29464 | Project Number: | EP 2362 |
| Attn | John Mahoney | Received: | 05/17/06 08:00 |

## PROJECT QUALITY CONTROL DATA
### Blank

| Analyte | Blank Value | Q | Units | Q.C. Batch | Lab Number | Analyzed Date/Time |
|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | |
| **6052727-BLK1** | | | | | | |
| Benzene | <0.000500 | | mg/kg | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| Ethylbenzene | <0.000500 | | mg/kg | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| Naphthalene | 0.00135 | | mg/kg | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| Toluene | <0.000970 | | mg/kg | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| Xylenes, total | <0.00148 | | mg/kg | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| *Surrogate: 1,2-Dichloroethane-d4* | 116% | | | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| *Surrogate: Dibromofluoromethane* | 86% | | | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| *Surrogate: Toluene-d8* | 100% | | | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| *Surrogate: 4-Bromofluorobenzene* | 113% | | | 6052727 | 6052727-BLK1 | 05/22/06 18:31 |
| **Polyaromatic Hydrocarbons by EPA 8270C** | | | | | | |
| **6053769-BLK1** | | | | | | |
| Acenaphthene | <0.0169 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Acenaphthylene | <0.0159 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Anthracene | <0.0129 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Benzo (a) anthracene | <0.0149 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Benzo (a) pyrene | <0.0109 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Benzo (b) fluoranthene | <0.0179 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Benzo (g,h,i) perylene | <0.0169 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Benzo (k) fluoranthene | <0.0228 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Chrysene | <0.0228 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Dibenz (a,h) anthracene | <0.0149 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Fluoranthene | <0.0149 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Fluorene | <0.0278 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Indeno (1,2,3-cd) pyrene | <0.0149 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Naphthalene | <0.0248 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Phenanthrene | <0.0119 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| Pyrene | <0.0139 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| 1-Methylnaphthalene | <0.0198 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| 2-Methylnaphthalene | <0.0238 | | mg/kg | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| *Surrogate: Terphenyl-d14* | 89% | | | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| *Surrogate: 2-Fluorobiphenyl* | 81% | | | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |
| *Surrogate: Nitrobenzene-d5* | 78% | | | 6053769 | 6053769-BLK1 | 05/21/06 08:53 |

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Client Environmental Projects (2411)
P. O. Box 1096
Mt. Pleasant, SC 29464
Attn John Mahoney

Work Order: NPE2474
Project Name: Laurel Bay
Project Number: EP 2362
Received: 05/17/06 08:00

## PROJECT QUALITY CONTROL DATA
## LCS

| Analyte | Known Val. | Analyzed Val | Q | Units | % Rec. | Target Range | Batch | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | |
| **6052727-BS1** | | | | | | | | |
| Benzene | 50.0 | 53.8 | | ug/kg | 108% | 76 - 123 | 6052727 | 05/22/06 18:01 |
| Ethylbenzene | 50.0 | 55.4 | M3 | ug/kg | 111% | 77 - 125 | 6052727 | 05/22/06 18:01 |
| Naphthalene | 50.0 | 61.1 | | ug/kg | 122% | 55 - 144 | 6052727 | 05/22/06 18:01 |
| Toluene | 50.0 | 53.1 | | ug/kg | 106% | 79 - 122 | 6052727 | 05/22/06 18:01 |
| Xylenes, total | 150 | 165 | | ug/kg | 110% | 71 - 129 | 6052727 | 05/22/06 18:01 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 55.0 | | | 110% | 72 - 125 | 6052727 | 05/22/06 18:01 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 42.4 | | | 85% | 73 - 124 | 6052727 | 05/22/06 18:01 |
| *Surrogate: Toluene-d8* | 50.0 | 49.5 | | | 99% | 80 - 124 | 6052727 | 05/22/06 18:01 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 58.2 | | | 116% | 25 - 185 | 6052727 | 05/22/06 18:01 |
| **Polyaromatic Hydrocarbons by EPA 8270C** | | | | | | | | |
| **6053769-BS1** | | | | | | | | |
| Acenaphthene | 1.66 | 1.22 | | mg/kg | 73% | 52 - 108 | 6053769 | 05/21/06 09:21 |
| Acenaphthylene | 1.66 | 1.23 | | mg/kg | 74% | 54 - 111 | 6053769 | 05/21/06 09:21 |
| Anthracene | 1.66 | 1.33 | | mg/kg | 80% | 56 - 122 | 6053769 | 05/21/06 09:21 |
| Benzo (a) anthracene | 1.66 | 1.31 | | mg/kg | 79% | 51 - 116 | 6053769 | 05/21/06 09:21 |
| Benzo (a) pyrene | 1.66 | 1.38 | | mg/kg | 83% | 46 - 130 | 6053769 | 05/21/06 09:21 |
| Benzo (b) fluoranthene | 1.66 | 1.35 | | mg/kg | 81% | 42 - 130 | 6053769 | 05/21/06 09:21 |
| Benzo (g,h,i) perylene | 1.66 | 1.40 | | mg/kg | 84% | 40 - 133 | 6053769 | 05/21/06 09:21 |
| Benzo (k) fluoranthene | 1.66 | 1.33 | | mg/kg | 80% | 44 - 129 | 6053769 | 05/21/06 09:21 |
| Chrysene | 1.66 | 1.26 | | mg/kg | 76% | 51 - 116 | 6053769 | 05/21/06 09:21 |
| Dibenz (a,h) anthracene | 1.66 | 0.981 | | mg/kg | 59% | 45 - 131 | 6053769 | 05/21/06 09:21 |
| Fluoranthene | 1.66 | 1.34 | | mg/kg | 81% | 58 - 117 | 6053769 | 05/21/06 09:21 |
| Fluorene | 1.66 | 1.24 | | mg/kg | 75% | 53 - 111 | 6053769 | 05/21/06 09:21 |
| Indeno (1,2,3-cd) pyrene | 1.66 | 1.15 | | mg/kg | 69% | 43 - 131 | 6053769 | 05/21/06 09:21 |
| Naphthalene | 1.66 | 0.963 | | mg/kg | 58% | 47 - 107 | 6053769 | 05/21/06 09:21 |
| Phenanthrene | 1.66 | 1.28 | | mg/kg | 77% | 55 - 113 | 6053769 | 05/21/06 09:21 |
| Pyrene | 1.66 | 1.37 | | mg/kg | 83% | 50 - 119 | 6053769 | 05/21/06 09:21 |
| 1-Methylnaphthalene | 1.68 | 1.06 | | mg/kg | 63% | 46 - 104 | 6053769 | 05/21/06 09:21 |
| 2-Methylnaphthalene | 1.66 | 1.10 | | mg/kg | 66% | 41 - 126 | 6053769 | 05/21/06 09:21 |
| *Surrogate: Terphenyl-d14* | 1.67 | 1.27 | | | 76% | 41 - 117 | 6053769 | 05/21/06 09:21 |
| *Surrogate: 2-Fluorobiphenyl* | 1.67 | 1.13 | | | 68% | 35 - 106 | 6053769 | 05/21/06 09:21 |
| *Surrogate: Nitrobenzene-d5* | 1.67 | 0.966 | | | 58% | 10 - 153 | 6053769 | 05/21/06 09:21 |

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

Client: Environmental Projects (2411)
P. O. Box 1096
Mt. Pleasant, SC 29464
Attn: John Mahoney

Work Order: NPE2474
Project Name: Laurel Bay
Project Number: EP 2362
Received: 05/17/06 08:00

## PROJECT QUALITY CONTROL DATA
### Matrix Spike

| Analyte | Orig. Val. | MS Val | Q | Units | Spike Conc | % Rec. | Target Range | Batch | Sample Spiked | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | |
| **6052727-MS1** | | | | | | | | | | |
| Benzene | 61.9 | 66.1 | MHA | ug/kg | 50.0 | 8% | 48 - 138 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| Naphthalene | 7.54 | 28.0 | | ug/kg | 50.0 | 41% | 16 - 162 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| Toluene | 19.9 | 106 | M7 | ug/kg | 50.0 | 172% | 40 - 143 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| Xylenes, total | 114 | 277 | | ug/kg | 150 | 109% | 36 - 144 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 53.3 | | ug/kg | 50.0 | 107% | 72 - 125 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| *Surrogate: Dibromofluoromethane* | | 39.7 | | ug/kg | 50.0 | 79% | 73 - 124 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| *Surrogate: Toluene-d8* | | 58.6 | | ug/kg | 50.0 | 117% | 80 - 124 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| *Surrogate: 4-Bromofluorobenzene* | | 87.9 | | ug/kg | 50.0 | 176% | 25 - 185 | 6052727 | NPE1967-03 | 05/23/06 04:30 |
| **Polyaromatic Hydrocarbons by EPA 8270C** | | | | | | | | | | |
| **6053769-MS1** | | | | | | | | | | |
| Acenaphthene | ND | 1.21 | | mg/kg | 1.57 | 77% | 41 - 112 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Acenaphthylene | ND | 1.22 | | mg/kg | 1.57 | 78% | 43 - 116 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Anthracene | ND | 1.27 | | mg/kg | 1.57 | 81% | 47 - 123 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Benzo (a) anthracene | ND | 1.24 | | mg/kg | 1.57 | 79% | 44 - 120 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Benzo (a) pyrene | ND | 1.33 | | mg/kg | 1.57 | 85% | 37 - 133 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Benzo (b) fluoranthene | ND | 1.32 | | mg/kg | 1.57 | 84% | 37 - 134 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Benzo (g,h,i) perylene | ND | 1.34 | | mg/kg | 1.57 | 85% | 36 - 135 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Benzo (k) fluoranthene | ND | 1.24 | | mg/kg | 1.57 | 79% | 34 - 136 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Chrysene | ND | 1.23 | | mg/kg | 1.57 | 78% | 44 - 121 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Dibenz (a,h) anthracene | ND | 0.959 | | mg/kg | 1.57 | 61% | 38 - 136 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Fluoranthene | ND | 1.29 | | mg/kg | 1.57 | 82% | 45 - 126 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Fluorene | ND | 1.23 | | mg/kg | 1.57 | 78% | 42 - 120 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Indeno (1,2,3-cd) pyrene | ND | 1.12 | | mg/kg | 1.57 | 71% | 35 - 135 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Naphthalene | ND | 1.08 | | mg/kg | 1.57 | 69% | 37 - 115 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Phenanthrene | ND | 1.22 | | mg/kg | 1.57 | 78% | 42 - 123 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| Pyrene | ND | 1.33 | | mg/kg | 1.57 | 85% | 40 - 128 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| 1-Methylnaphthalene | ND | 1.13 | | mg/kg | 1.58 | 72% | 29 - 116 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| 2-Methylnaphthalene | ND | 1.22 | | mg/kg | 1.57 | 78% | 32 - 131 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| *Surrogate: Terphenyl-d14* | | 1.15 | | mg/kg | 1.57 | 73% | 41 - 117 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| *Surrogate: 2-Fluorobiphenyl* | | 1.05 | | mg/kg | 1.57 | 67% | 35 - 106 | 6053769 | NPE2428-02 | 05/21/06 09:50 |
| *Surrogate: Nitrobenzene-d5* | | 1.03 | | mg/kg | 1.57 | 66% | 10 - 153 | 6053769 | NPE2428-02 | 05/21/06 09:50 |

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| | | | |
|---|---|---|---|
| Client | Environmental Projects (2411) | Work Order: | NPE2474 |
| | P. O. Box 1096 | Project Name: | Laurel Bay |
| | Mt. Pleasant, SC 29464 | Project Number: | EP 2362 |
| Attn | John Mahoney | Received: | 05/17/06 08:00 |

## PROJECT QUALITY CONTROL DATA
### Matrix Spike Dup

| Analyte | Orig. Val. | Duplicate | Q | Units | Spike Conc | % Rec. | Target Range | RPD | Limit | Batch | Sample Duplicated | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | | | |
| **6052727-MSD1** | | | | | | | | | | | | |
| Benzene | 61.9 | 50.0 | MHA | ug/kg | 50.0 | -24% | 48 - 138 | 28 | 34 | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| Naphthalene | 7.54 | 25.0 | | ug/kg | 50.0 | 35% | 16 - 162 | 11 | 48 | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| Toluene | 19.9 | 85.3 | | ug/kg | 50.0 | 131% | 40 - 143 | 22 | 41 | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| Xylenes, total | 114 | 229 | | ug/kg | 150 | 77% | 36 - 144 | 19 | 35 | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 53.8 | | ug/kg | 50.0 | 108% | 72 - 125 | | | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| *Surrogate: Dibromofluoromethane* | | 40.6 | | ug/kg | 50.0 | 81% | 73 - 124 | | | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| *Surrogate: Toluene-d8* | | 59.5 | | ug/kg | 50.0 | 119% | 80 - 124 | | | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| *Surrogate: 4-Bromofluorobenzene* | | 89.8 | | ug/kg | 50.0 | 180% | 25 - 185 | | | 6052727 | NPE1967-03 | 05/23/06 05:01 |
| **Polyaromatic Hydrocarbons by EPA 8270C** | | | | | | | | | | | | |
| **6053769-MSD1** | | | | | | | | | | | | |
| Acenaphthene | ND | 1.19 | | mg/kg | 1.66 | 72% | 41 - 112 | 2 | 34 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Acenaphthylene | ND | 1.19 | | mg/kg | 1.66 | 72% | 43 - 116 | 2 | 30 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Anthracene | ND | 1.26 | | mg/kg | 1.66 | 76% | 47 - 123 | 0.8 | 28 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Benzo (a) anthracene | ND | 1.23 | | mg/kg | 1.66 | 74% | 44 - 120 | 0.8 | 31 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Benzo (a) pyrene | ND | 1.29 | | mg/kg | 1.66 | 78% | 37 - 133 | 3 | 31 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Benzo (b) fluoranthene | ND | 1.28 | | mg/kg | 1.66 | 77% | 37 - 134 | 3 | 40 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Benzo (g,h,i) perylene | ND | 1.29 | | mg/kg | 1.66 | 78% | 36 - 135 | 4 | 36 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Benzo (k) fluoranthene | ND | 1.23 | | mg/kg | 1.66 | 74% | 34 - 136 | 0.8 | 33 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Chrysene | ND | 1.17 | | mg/kg | 1.66 | 70% | 44 - 121 | 5 | 31 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Dibenz (a,h) anthracene | ND | 0.953 | | mg/kg | 1.66 | 57% | 38 - 136 | 0.6 | 34 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Fluoranthene | ND | 1.28 | | mg/kg | 1.66 | 77% | 45 - 126 | 0.8 | 33 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Fluorene | ND | 1.20 | | mg/kg | 1.66 | 72% | 42 - 120 | 2 | 30 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Indeno (1,2,3-cd) pyrene | ND | 1.11 | | mg/kg | 1.66 | 67% | 35 - 135 | 0.9 | 34 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Naphthalene | ND | 0.962 | | mg/kg | 1.66 | 58% | 37 - 115 | 12 | 37 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Phenanthrene | ND | 1.22 | | mg/kg | 1.66 | 73% | 42 - 123 | 0 | 33 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| Pyrene | ND | 1.27 | | mg/kg | 1.66 | 77% | 40 - 128 | 5 | 33 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| 1-Methylnaphthalene | ND | 1.02 | | mg/kg | 1.67 | 61% | 29 - 116 | 10 | 44 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| 2-Methylnaphthalene | ND | 1.07 | | mg/kg | 1.66 | 64% | 32 - 131 | 13 | 49 | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| *Surrogate: Terphenyl-d14* | | 1.13 | | mg/kg | 1.66 | 68% | 41 - 117 | | | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| *Surrogate: 2-Fluorobiphenyl* | | 1.04 | | mg/kg | 1.66 | 63% | 35 - 106 | | | 6053769 | NPE2428-02 | 05/21/06 10:18 |
| *Surrogate: Nitrobenzene-d5* | | 0.936 | | mg/kg | 1.66 | 56% | 10 - 153 | | | 6053769 | NPE2428-02 | 05/21/06 10:18 |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | Environmental Projects (2411) | Work Order: | NPE2474 |
| | P. O. Box 1096 | Project Name: | Laurel Bay |
| | Mt. Pleasant, SC 29464 | Project Number: | EP 2362 |
| Attn | John Mahoney | Received: | 05/17/06 08:00 |

## CERTIFICATION SUMMARY

**TestAmerica - Nashville, TN**

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

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | Environmental Projects (2411) | Work Order: | NPE2474 |
| | P. O. Box 1096 | Project Name: | Laurel Bay |
| | Mt. Pleasant, SC 29464 | Project Number: | EP 2362 |
| Attn | John Mahoney | Received: | 05/17/06 08:00 |

## DATA QUALIFIERS AND DEFINITIONS

**M3** Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).

**M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).

**MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

## METHOD MODIFICATION NOTES

TestAmerica
ANALYTICAL TESTING CORPORATION

**Nashville Division**

**COOLER RECEIPT FORM** **BC#** NPE2474

Cooler Received/Opened On 05/17/2006 @ 08:00

1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below: 4209

Fed-Ex UPS Velocity DHL Route Off-street Misc.

2. Temperature of representative sample or temperature blank when opened: 0.1 Degrees Celsius
(indicate IR Gun ID#)

NA A00466 A00750 A01124 100190 101282 Raynger ST

3. Were custody seals on outside of cooler?..... (YES)...NO...NA

a. If yes, how many and where: 2 front

4. Were the seals intact, signed, and dated correctly?..... (YES)...NO...NA

5. Were custody papers inside cooler?..... (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-5 (intial)..... RB

6. Were custody seals on containers: YES (NO) and Intact YES NO (NA)

were these signed, and dated correctly?..... YES...NO...(NA)

7. What kind of packing material used? (Bubblewrap) Peanuts Vermiculite Foam Insert

Plastic bag Paper Other_____ None

8. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

9. Did all containers arrive in good condition ( unbroken)?..... (YES)...NO...NA

10. Were all container labels complete (#, date, signed, pres., etc)?..... (YES)...NO...NA

11. Did all container labels and tags agree with custody papers?..... (YES)...NO...NA

12. a. Were VOA vials received?..... (YES)...NO...NA

b. Was there any observable head space present in any VOA vial?..... YES...(NO)...NA

I certify that I unloaded the cooler and answered questions 6-12 (intial)..... RB

13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used..... (YES)...NO...NA

If preservation in-house was needed, record standard ID of preservative used here_____

14. Was residual chlorine present?..... YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)..... SW

15. Were custody papers properly filled out (ink, signed, etc)?..... (YES)...NO...NA

16. Did you sign the custody papers in the appropriate place?..... (YES)...NO...NA

17. Were correct containers used for the analysis requested?..... (YES)...NO...NA

18. Was sufficient amount of sample sent in each container?..... (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 15-18 (intial)..... SW

I certify that I attached a label with the unique LIMS number to each container (intial)..... SW

19. Were there Non-Conformance issues at login YES (NO) Was a PIPE generated YES (NO) #_____

BIS = Broken in shipment

TestAmerica
ANALYTICAL TESTING CORPORATION

**NPE2474**
05/31/06 23:59

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

Client Name: ~~ACTus~~ EPG  Client #: 2411
Address:
City/State/Zip Code:
Project Manager: Aggie DeLoach John Mahoney
Telephone Number:  Fax:
Sampler Name: (Print Name) AJ MANUCY
Sampler Signature:

Project Name: LAUREL BAY Housing
Project #: EP2362
Site/Location ID: LAUREL BAY  State: SC
Report To: J. MAHONEY
Invoice To:
Quote #:  PO#:

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N

| SAMPLE ID | Date Sampled | Time Sampled | G = Grab, C = Composite | Field Filtered | Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other | Preservation & # of Containers: $HNO_3$ | HCl | NaOH | $H_2SO_4$ | Methanol | None | Other (Specify) | Analyze For: X BTEX+Naph | X PAH | QC Deliverables | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 565 DAHLIA | 5-16 | 9:00 AM | | | | | | | | | | | X | X | | NPE 2474-01 |

QC Deliverables:
None
X Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

Special Instructions:

| | | | | | | |
|---|---|---|---|---|---|---|
| Relinquished By: A. Manucy | 5/16/06 | Time: 1410 | Received By: | 5/16 | Time: 1410 |
| Relinquished By: | 5/16/06 | Time: 1730 | Received By: | Date: | Time: |
| Relinquished By: | Date: | Time: | Received By: | 5-17-06 Date: | 0800 Time: |

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp: 0.1c
Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N
Method of Shipment: 8569 3464 4209 FedEx to TA-Nashville

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

CDM - AECOM
Multimedia Joint Venture

Pace Analytical®
www.pacelabs.com

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

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

## ANALYTICAL RESULTS

Project: LAUREL BAY 7/30/08
Pace Project No.: 9224584

**Sample: 293 BIRCH A** **Lab ID: 9224584005** Collected: 07/30/08 11:30 Received: 08/01/08 07:55 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV Low Level** | Analytical Method: EPA 8260 | | | | | | | |
| Ethylbenzene | **0.0** | ug/L | | 1 | | 08/06/08 12:30 | 100-41-4 | |
| Naphthalene | **0.32** | ug/L | | 1 | | 08/06/08 12:30 | 91-20-3 | |
| Toluene | **0.0** | ug/L | | 1 | | 08/06/08 12:30 | 108-88-3 | |
| m&p-Xylene | **0.0** | ug/L | | 1 | | 08/06/08 12:30 | 1330-20-7 | |
| o-Xylene | **0.0** | ug/L | | 1 | | 08/06/08 12:30 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 98 | % | 87-109 | 1 | | 08/06/08 12:30 | 460-00-4 | |
| Dibromofluoromethane (S) | 96 | % | 85-115 | 1 | | 08/06/08 12:30 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 99 | % | 79-120 | 1 | | 08/06/08 12:30 | 17060-07-0 | |
| Toluene-d8 (S) | 101 | % | 70-120 | 1 | | 08/06/08 12:30 | 2037-26-5 | |

**Sample: 565 DAHLIA A** **Lab ID: 9224584006** Collected: 07/30/08 13:00 Received: 08/01/08 07:55 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8270 MSSV PAH by SIM SPE** | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535 | | | | | | | |
| Acenaphthene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.5 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.050 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.30 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 0.30 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 206-44-0 | |
| Fluorene | ND | ug/L | 0.31 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 90-12-0 | |
| 2-Methylnaphthalene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.5 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 91-20-3 | |
| Phenanthrene | **0.29** | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 85-01-8 | |
| Pyrene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 129-00-0 | |
| Nitrobenzene-d5 (S) | 54 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 4165-60-0 | |
| 2-Fluorobiphenyl (S) | 57 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 321-60-8 | |
| Terphenyl-d14 (S) | 73 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:31 | 1718-51-0 | |
| **8260 MSV Low Level** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 1.0 | 1 | | 08/07/08 22:11 | 71-43-2 | |
| Ethylbenzene | ND | ug/L | 1.0 | 1 | | 08/07/08 22:11 | 100-41-4 | |
| Naphthalene | ND | ug/L | 2.0 | 1 | | 08/07/08 22:11 | 91-20-3 | |
| Toluene | ND | ug/L | 1.0 | 1 | | 08/07/08 22:11 | 108-88-3 | |
| m&p-Xylene | ND | ug/L | 2.0 | 1 | | 08/07/08 22:11 | 1330-20-7 | |
| o-Xylene | ND | ug/L | 1.0 | 1 | | 08/07/08 22:11 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 97 | % | 87-109 | 1 | | 08/07/08 22:11 | 460-00-4 | |

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

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

## ANALYTICAL RESULTS

Project: LAUREL BAY 7/30/08
Pace Project No.: 9224584

**Sample: 565 DAHLIA A** **Lab ID: 9224584006** Collected: 07/30/08 13:00 Received: 08/01/08 07:55 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV Low Level** | Analytical Method: EPA 8260 | | | | | | | |
| Dibromofluoromethane (S) | 99 | % | 85-115 | 1 | | 08/07/08 22:11 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 101 | % | 79-120 | 1 | | 08/07/08 22:11 | 17060-07-0 | |
| Toluene-d8 (S) | 99 | % | 70-120 | 1 | | 08/07/08 22:11 | 2037-26-5 | |

**Sample: 528 LAUREL BAY A** **Lab ID: 9224584007** Collected: 07/30/08 13:50 Received: 08/01/08 07:55 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8270 MSSV PAH by SIM SPE** | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3535 | | | | | | | |
| Acenaphthene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.5 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.050 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.30 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 0.30 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 206-44-0 | |
| Fluorene | ND | ug/L | 0.31 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 90-12-0 | |
| 2-Methylnaphthalene | ND | ug/L | 2.0 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.5 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 0.20 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 85-01-8 | |
| Pyrene | ND | ug/L | 0.10 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 129-00-0 | |
| Nitrobenzene-d5 (S) | 51 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 4165-60-0 | |
| 2-Fluorobiphenyl (S) | 57 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 321-60-8 | |
| Terphenyl-d14 (S) | 72 | % | 50-150 | 1 | 08/04/08 00:00 | 08/13/08 09:54 | 1718-51-0 | |
| **8260 MSV Low Level** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 1.0 | 1 | | 08/06/08 17:15 | 71-43-2 | |
| Ethylbenzene | ND | ug/L | 1.0 | 1 | | 08/06/08 17:15 | 100-41-4 | |
| Naphthalene | ND | ug/L | 2.0 | 1 | | 08/06/08 17:15 | 91-20-3 | |
| Toluene | ND | ug/L | 1.0 | 1 | | 08/06/08 17:15 | 108-88-3 | |
| m&p-Xylene | ND | ug/L | 2.0 | 1 | | 08/06/08 17:15 | 1330-20-7 | |
| o-Xylene | ND | ug/L | 1.0 | 1 | | 08/06/08 17:15 | 95-47-6 | |
| 4-Bromofluorobenzene (S) | 100 | % | 87-109 | 1 | | 08/06/08 17:15 | 460-00-4 | |
| Dibromofluoromethane (S) | 94 | % | 85-115 | 1 | | 08/06/08 17:15 | 1868-53-7 | |
| 1,2-Dichloroethane-d4 (S) | 96 | % | 79-120 | 1 | | 08/06/08 17:15 | 17060-07-0 | |
| Toluene-d8 (S) | 101 | % | 70-120 | 1 | | 08/06/08 17:15 | 2037-26-5 | |

**Appendix D**
**Regulatory Correspondence**

CDM - AECOM
Multimedia Joint Venture

D H E C

PROMOTE PROTECT PROSPER



7 October 2008

Tri-Command Communities
Attn: Mr. Robert Bible
600 Laurel Bay Road
Beaufort, SC 29906

Re: MCAS – Laurel Bay Housing – 565 Dahlia
**Site ID # 03735**
UST Closure Reports received 15 August 2007
Beaufort County

Dear Mr. Bible:

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

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

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

Sincerely,

Michael Bishop, Hydrogeologist
Groundwater Quality Section
Bureau of Water

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

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

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

8 December 2008

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

Re: MCAS – Laurel Bay Housing – 565 Dahlia
**Site ID # 03735**
Groundwater Sampling Results received 6 November 2008
Beaufort County

Dear Mr. Ehde:

Per the Department's request, a groundwater sample was collected from the referenced site. The groundwater results were reported as non-detect. Based on the information and analytical data submitted, the Department recognizes that MCAS has adequately addressed the known environmental contamination identified on the property to date in accordance with the approved scope of work. Consequently, no further investigation is required at this time. Please note, this statement pertains only to the portion of the site addressed in the referenced report and does not apply to other areas of the site and/or any other potential regulatory violations. Further, the Department retains the right to request further investigation if deemed necessary.

Should you have any questions, please contact me at 803-896-4179 (office phone), 803-896-6245 (fax) or cookejt@dhec.sc.gov.

Sincerely,
AST Petroleum Restoration
& Site Environmental Investigations Section
Land Revitalization Division
Bureau of Land and Waste Management
SC Dept. of Health & Environmental Control

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

cc: Region 8 District EQC
Tri-Command Communities; Attn: Mr. Robert Bible; 600 Laurel Bay Road Beaufort, SC 29906
Technical File