

**SUMMARY REPORT  
146 BIRCH DRIVE (FORMERLY 110 BIRCH 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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Norfolk, Virginia 23511-3095**

**Prepared by:**

**CDM - AECOM**  
Multimedia Joint Venture

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

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

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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
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 146 Birch Drive (Formerly 110 Birch 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

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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.

The LBMH UST removal and assessment process is described below in Section 1.2. The LBMH multi-media investigation selection process tree, used to evaluate the environmental impact of USTs for most sites at LBMH, is presented in Appendix A. It should be noted that because the USTs were removed prior to 2007, the subject property of this report did not follow the typical multi-media investigation selection process presented in Appendix A.

It should also be noted that the house at the subject property has been demolished and the property is an empty lot. There are no current plans for construction in this area.

## **1.2 UST Removal and Assessment Process**

As stated above, the assessment process at this property did not follow the typical process presented in Appendix A.

During the UST removal process, soil samples were 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*

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(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 whether further investigation was required (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up soil and 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. 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.

## **2.0 SAMPLING ACTIVITIES AND RESULTS**

The following section presents the sampling activities and associated results for 146 Birch Drive (Formerly 110 Birch Drive). Details regarding the soil investigation conducted during the UST removal at this site are provided in the *SCDHEC UST Assessment Report – 110 Birch Drive* (MCAS Beaufort, 2005). The UST Assessment Report is provided in Appendix B. Details regarding the additional soil and IGWA sampling activities at this site are provided in the *Tier II*

*Assessment Report for 110 Birch Street Laurel Bay* (ADVENT Environmental, Inc, 2007). The laboratory reports that include the pertinent soil and IGWA analytical results for this site are presented in Appendices C and D, respectively.

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

On June 13, 2005, a single 280 gallon heating oil UST was removed from underneath the front concrete path adjacent to the driveway at 146 Birch Drive (Formerly 110 Birch Drive). The former UST location is indicated on Figure 2 of the UST Assessment Report (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 4'0" bgs. Soil samples were collected from two of the side walls (4'0" bgs) of the excavation and from the bottom of the excavation (5'6" bgs) 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 UST Removal 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 146 Birch Drive (Formerly 110 Birch Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated November 7, 2005, SCDHEC requested an IGWA for 146 Birch Drive (Formerly 110 Birch Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.



### **2.3 Tier 2 Soil Sampling**

In November 2005, four soil borings were advanced at 146 Birch Drive (Formerly 110 Birch Drive). One soil boring, SB01, was placed in the same general location as the former heating oil UST. The former UST location is indicated on the figures of the UST Assessment Report (Appendix B). Three additional soil borings (SB02, SB03 and SB04) were also installed at 146 Birch Drive (Formerly 110 Birch Drive) to delineate potential contamination. The soil borings were collocated with the permanent monitoring wells discussed in Section 2.5. A single soil sample was collected from each soil boring and shipped to an offsite laboratory for analysis of the petroleum COPCs. Further details are provided in the *Tier II Assessment Report for 110 Birch Street Laurel Bay* (ADVENT Environmental, Inc, 2007).

### **2.4 Tier 2 Soil Analytical Results**

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 2. A copy of the laboratory analytical data reports are included as Appendix C.

The soil results collected from 146 Birch Drive (Formerly 110 Birch Drive) at SB01 were greater than the SCDHEC RBSLs (Table 2), which indicated that further investigation was required.

### **2.5 Groundwater Sampling**

In November 2006, the four soil borings were converted into permanent monitoring wells at 146 Birch Drive (Formerly 110 Birch Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). Further details are provided in the *Tier II Assessment Report for 110 Birch Street Laurel Bay* (ADVENT Environmental, Inc, 2007).

The sampling strategy for this phase of the investigation required a one-time sampling event of the monitoring wells. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Field forms are provided in the *Tier II Assessment Report for 110 Birch Street Laurel Bay* (ADVENT Environmental, Inc, 2007).

### **2.6 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 146 Birch Drive (Formerly 110 Birch Drive) 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.

### **3.0 PROPERTY STATUS**

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 146 Birch Drive (Formerly 110 Birch Drive). This NFA determination was obtained in a letter dated April 27, 2017. SCDHEC's NFA letter is provided in Appendix E.

### **4.0 REFERENCES**

Marine Corps Air Station Beaufort, 2005. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 110 Birch Drive, Laurel Bay Military Housing Area*, October 2005.

ADVENT Environmental, Inc, 2007. *Tier II Assessment Report for 110 Birch Street, Laurel Bay, Marine Corps Air Station, Beaufort, South Carolina*, February 2007.

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 - UST Assessment Report**  
**146 Birch Drive (Formerly 110 Birch Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 06/13/05		
		110L	110R	110B
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>				
Benzene	0.003	ND	ND	ND
Ethylbenzene	1.15	ND	ND	<b>0.0064</b>
Naphthalene	0.036	0.012	ND	<b>0.67</b>
Toluene	0.627	ND	ND	ND
Xylenes, Total	13.01	ND	ND	<b>0.24</b>
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>				
Benzo(a)anthracene	0.066	ND	ND	<b>6.9</b>
Benzo(b)fluoranthene	0.066	ND	ND	<b>3.5</b>
Benzo(k)fluoranthene	0.066	ND	ND	<b>4.1</b>
Chrysene	0.066	ND	ND	<b>3.9</b>
Dibenz(a,h)anthracene	0.066	ND	ND	ND

**Notes:**

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 (SCDHEC, May 2001) 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 - Soil - Tier 2 Assessment**  
**146 Birch Drive (Formerly 110 Birch Drive)**  
**Laurel Bay Military Housing Area**  
**Marine Corps Air Station Beaufort**  
**Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Samples Collected 11/14/06 through 11/16/06			
		110SB01 11/15/06	110SB02 11/14/06	110SB03 11/14/06	110SB04 11/16/06
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)</b>					
Benzene	0.003	ND	ND	ND	ND
Ethylbenzene	1.15	ND	ND	ND	ND
Naphthalene	0.036	<b>0.14</b>	ND	ND	ND
Toluene	0.627	ND	ND	ND	ND
Xylenes, Total	13.01	<b>0.0070</b>	ND	ND	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)</b>					
Benzo(a)anthracene	0.66	<b>0.10</b>	ND	ND	ND
Benzo(b)fluoranthene	0.66	<b>0.10</b>	ND	ND	ND
Benzo(k)fluoranthene	0.66	ND	ND	ND	ND
Chrysene	0.66	<b>0.12</b>	ND	ND	ND
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND

**Notes:**

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

**Table 3  
Laboratory Analytical Results - Groundwater  
146 Birch Drive (Formerly 110 Birch Drive)  
Laurel Bay Military Housing Area  
Marine Corps Air Station Beaufort  
Beaufort, South Carolina**

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Samples Collected 11/17/06 and 11/20/06			
			110MW01 11/20/06	110MW02 11/17/06	110MW03 11/17/06	110MW04 11/20/06
<b>Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)</b>						
Benzene	5	16.24	ND	ND	ND	ND
Ethylbenzene	700	45.95	ND	ND	ND	ND
Naphthalene	25	29.33	ND	ND	ND	ND
Toluene	1000	105,445	ND	ND	ND	ND
Xylenes, Total	10,000	2,133	ND	ND	ND	ND
<b>Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)</b>						
Benzo(a)anthracene	10	NA	ND	ND	ND	ND
Benzo(b)fluoranthene	10	NA	ND	ND	ND	ND
Benzo(k)fluoranthene	10	NA	ND	ND	ND	ND
Chrysene	10	NA	ND	ND	ND	ND
Dibenz(a,h)anthracene	10	NA	ND	ND	ND	ND

**Notes:**

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

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

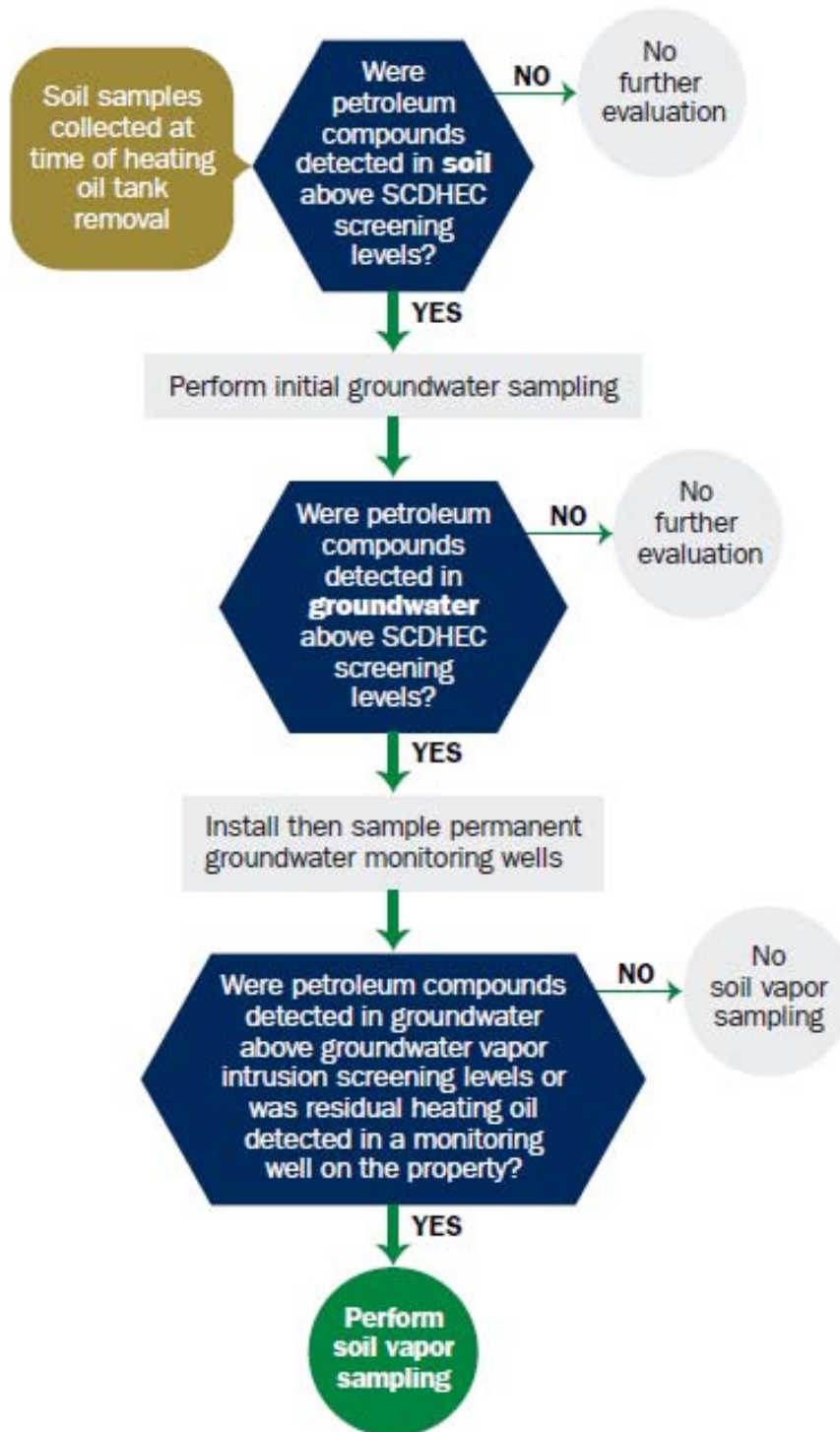
SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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





Appendix A - Multi-Media Selection Process for LBMH

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

**FINAL**  
**ASSESSMENT REPORT**

LAUREL BAY HOUSING AREA, 110 BIRCH STREET  
MARINE CORPS AIR STATION, BEAUFORT, SOUTH CAROLINA

Prepared for:

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P.O. Box 5160  
Parris Island, SC 29905

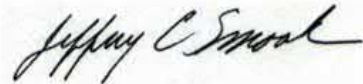
**Contract Number**  
50701040/02050105

**Prepared By:**  
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NOV 4 2005  
Water Monitoring, Assessment &  
Protection Division



Brian R. Crawford, R.E.M.  
Project Manager



Jeffrey C. Smoak, P.E.  
Principal

OCTOBER 2005  
ADVENT 05-512

## Executive Summary

The initial Statement of Work was to remove two (2) Underground Storage Tanks (USTs) at 110 and 112 Birch Street in the Laurel Bay Housing Area at the Marine Corps Air Station (MCAS) in Beaufort, South Carolina. One (1) UST was removed from 110 Birch Street, and one (1) UST was removed from 112 Birch Street.

The tanks were excavated and removed using a JCB 214 backhoe. Residual fluid inside the USTs was vacuumed out prior to removal. Soils were screened using a photo-ionized detector (PID) during excavation. The tanks were triple-rinsed using a pressure washer. Rinse-water was contained in the decon-pad area.

Three (3) soil samples were collected from the excavation pit after each tank removal. Two (2) soil samples were collected from the east and west walls of the excavation, and one (1) sample was collected from the floor of the excavation. Soil samples were preserved on ice and submitted to Pace Analytical (NELAC #99006) for the analysis of BTEX, MTBE, naphthalene, and PAHs, as required by the South Carolina Department of Health and Environmental Control (SCDHEC) guidance document dated March 15, 2000.

Concentrations of total PAHs, BTEX, MTBE, and naphthalene were reported below detection limits (BDL) or below risk based screening levels (RBSLs) in two (2) soil samples collected from the 110 excavation. Concentrations of PAHs and naphthalene were reported above RBSLs in soil sample 110B. Soil sample 110B was collected from the base of excavation 110. Concentrations of total PAHs, BTEX, MTBE, and naphthalene were reported below detection limits (BDL) in all three (3) soil samples collected from the 112 excavation.

Two (2) USTs, impacted soils, and associated decontamination water were disposed of off site (see assessment report). Personal Protective Equipment (PPE), impacted soils, and other excavation debris were contained in one (1) roll-off dumpster provided by Global Environmental, Inc. Decontamination water was removed from the decon-pad area by the vacuum truck.

The excavations were backfilled with clean soil and compacted in two foot lift intervals. Each lift was compacted to greater than 95%, as demonstrated on the attached compaction test results.

South Carolina Department of Health and Environmental Control (S.C.D.H.E.C.)  
**Underground Storage Tank (UST) Assessment Report**

Date Received

State Use Only

Submit Completed Form to:  
UST Regulatory Section  
SCDHEC  
2600 Bull Street  
Columbia, South Carolina  
Telephone (803)896-6240

**I. OWNERSHIP OF UST(S)**

Marine Corps Air Station-Laurel Bay Housing

Owner Name (Corporation, Individual, Public Agency, Other)

Building 601 2nd floor Geiger Blvd.  
Mailing Address

Beaufort  
City

South Carolina  
State

299904-5001  
Zip Code

843  
Area Code

228-7317  
Telephone Number

Alice Howard  
Contact Person

**II. SITE IDENTIFICATION AND LOCATION**

Heating Oil Tank (<500 gallon)  
Site I.D. #

Laurel Bay Housing for MCAS  
Facility Name or Company Site Identifier

110 Birch Steet (off of Highway 21).  
Street Address or State Road (as applicable)

Beaufort  
City

Beaufort  
County

**III. INSURANCE INFORMATION**

Insurance Statement

The petroleum release reported to DHEC on NA at UST Permit # \_\_\_\_\_ 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 x (check one)

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 (Read and sign after completing entire submittal.)**

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

\_\_\_\_\_  
Date

**To be completed by a Notary Public:**

Sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
(Name)

Notary Public for the state of

*Please affix State seal if you are commissioned outside South Carolina*

**V. UST INFORMATION**

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Heat oil					
280 gal					
>40					
steel					
NA					
4.0 ft					
No					
No					
Removal					
6-13-05					
no					
no					

M. Method of Disposal of any USTs removed from the ground (attach disposal manifest).

Tank was triple rinsed, destroyed and recycled at the Beaufort County Recycling Landfill

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

Water used to decontaminate the UST was temporarily stored and then vacuumed and properly disposed of. (see attached manifest)

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

No holes or pitting were found in tank 110 Birch Street.

**VI. PIPING INFORMATION**

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

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Copper/ steel					
NA					
1					
Suction					
Yes					
No					
No					
>40 yrs					

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

Corrosion and golf-ball size holes observed at base of tank.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**VII. BRIEF SITE DESCRIPTION AND HISTORY**

Site was used for military housing for the MCAS. Tank was used as a heating oil tank for the adjacent dwelling which was built in the early 1950's. There are no records as to the date the tanks were taken out of commission.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



### VIII. SITE CONDITIONS

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

# IX. SAMPLE INFORMATION

S.C.D.H.E.C. Lab Certification Number Pace Analytical Labs 99006

A. UST 110 was located within two feet of building 110. Soil samples were collected 13 June, 2005.

Sample #	Location	Sample Type (Soil/Water)	Depth*	Date/Time of Collection	Collected by	OVA Result
1 110L	Side wall of tank	Soil	~ 4.0 ft bls	6-13-05 1300	SCM	640 ppm
2 110R	Side Wall of Tank	Soil	~ 4.0 ft bls	6-13-05 1315	SCM	192 ppm
3 110B	Bottom of Tank	Soil	~ 5.5 ft bls	6-13-05 1330	SCM	880 ppm
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

\* = Depth Below the Surrounding Land Surface.

## X. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store (preserve) the samples. Please use the space provided below.

Soil Samples were collected using a hand auger. Samples were containerized in bottles with the appropriate preservatives provided by the laboratory. Once the sample was collected, it was put on ice and shipped to the laboratory to be analyzed for the targeted parameters.

# XI. RECEPTORS

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

**SITE MAP**  
**MARINE CORPS AIR STATION**  
**110 and 112 BIRCH STREET, BEAUFORT, SOUTH**  
**CAROLINA**



**Legend**

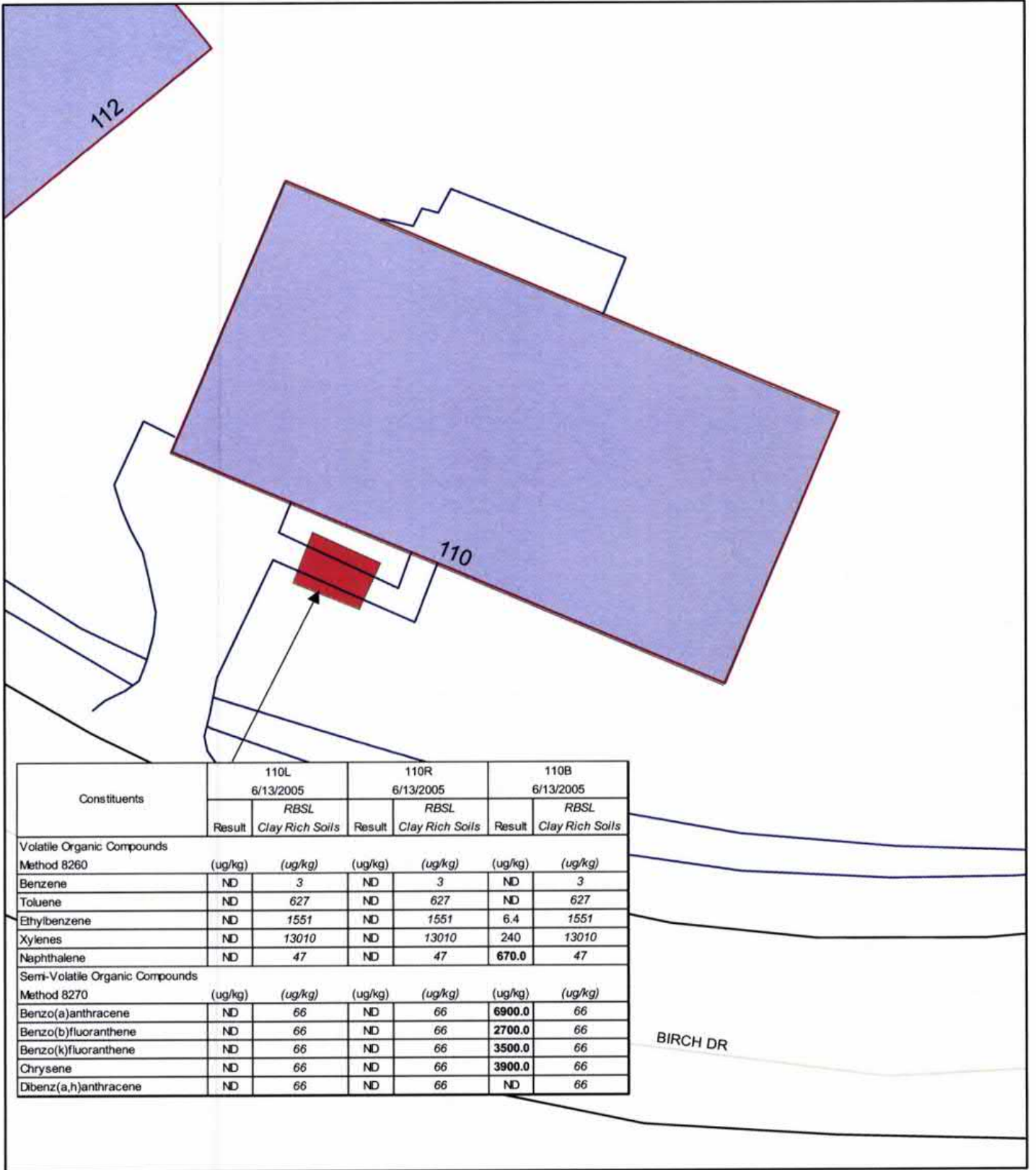
- Bldgs
- Roads

Projection: Clarke 1866 UTM Zone 17N  
 Map Scale: 1:1,700  
 Created By: JWW 7-13-2005



**Figure-1**  
 Site Location Map  
 Laurel Bay Housing Area  
 MCAS Beaufort, SC





**Legend**

- UST
- Bldg
- Rds

Projection: NAD 1983 State Plane South Carolina Fips 3900ft  
 Map Scale: 1:200  
 Created by: JWW, 7-13-2005



**Figure-2**  
**CoC Concentrations**  
**Birch Drive-110**  
**Laurel Bay, South Carolina**



**MANIFESTS FOR OILY WATER  
DISPOSAL**



# US Water Recovery

Project # 05-1111

<b>Non-Hazardous Wastewater Manifest</b>		<b>Number:</b> D-1077	
1. Generator's EPA ID# (if applicable):		Waste ID Number:	
2. Generator's Name and Mailing Address: Advebt Env/ Beaufort MCAS Beaufort SC		Phone ( )  PO#:	
3. Agent of Generator and Mailing Address: Sani-Tech Environment, LLC 511 Old Mt. Holly Rd. Goose Creek, SC 29445		Phone (843) 797-0402  PO#:	
4. Transporter Company Name: Sani-Tech Environment, LLC 511 Old Mt. Holly Rd. Goose Creek, SC 29445		Phone (843) 797-0402	
Truck & Trailer License Number:			
5. Transporter U.S. EPA ID#:			
6. Facility Name and Site Address: U S Water Recovery 435 Old Mt. Holly Rd. Mt. Holly, SC 29445		Phone: (843) 797-8574  Fax: (843) 797-2128	Mailing Address: U S Water Recovery P O Box 70367 North Charleston, SC 29415 Phone: (843) 744-0118  Fax: (843) 744-0730
7. Facility U.S. EPA ID#:			
Start Level:	End Level:	Total Gallons:	Tank Number:
8. U.S. DOT Description		Container	Unit
		No.	Type
Non-Hazardous, non-regulated waste water		1	30-125 200 GAL
Combined amount from 110 and 112 Back street, Laurel Bay			
9. Generator's Certification: I hereby declare that the contents of this consignment are not hazardous by definition or listing and are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina. I further certify that the contents of this consignment are as represented by the description contained on the Waste Profile Form previously submitted to and approved by the Designated Facility.			
Printed/Typed Name: Charles H. Herron		Signature: <i>Charles H. Herron</i>	Date: 6/13/05
10. Transporter Acknowledgement of Receipt of Materials			
Printed/Typed Name: Wendy Rose		Signature: <i>Wendy Rose</i>	Date: 6/13/05
11. Discrepancy Indication space:			
12. Facility Owner or Operator: Certification of Receipt of Materials			
Printed/Typed Name: Paul Goodson		Signature: <i>Paul Goodson</i>	Date: 6/14/05

White - Facility    Yellow - Transporter    Pink - Generator

**MANIFESTS FOR  
CONTAMINATED SOILS**

06-15-2005

09:16

GLOBAL ENVIRONMENTAL ASSURANCE → 18432286349

NO. 926 0002

08/31/2004 16:12 GLOB  
07/07/2004 11:49 FAX 18432803378

ENVIRONMENTAL ASSURANCE → 18433881891

NO. 484 0002



OAKRIDGE LANDFILL  
WASTE MANAGEMENT COMPANY

SPECIAL WASTE MANIFEST

05-512

Approval # VB 3878  
Expiration 06/25/05

Generator: MCAS BEAUFORT

Account Number: 490-355

Location/Address: HIGHWAY 21 S BEAUFORT SC (07)

Tele Number: 843-662-8916 Contact W G DUKES JR

Generator Signature:

15 June 2005

\*\*\*\*\* TO BE COMPLETED BY TRANSPORTER \*\*\*\*\*

Transporter of Waste: GLOBAL ENVIRO ASSURANCE Track: 003

Date: 6/15/05

Driver's Signature:

\*\*\*\*\* TO BE COMPLETED BY OAKRIDGE LANDFILL \*\*\*\*\*

Disposal Site: Oakridge Landfill DWP 130

Description of Waste: SOLUST REMOVAL

Ticket Number: \_\_\_\_\_

Tonnage: \_\_\_\_\_

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

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

2183 HWY 78, (POB 145), NORCHESTER, SC, 29437  
TEL: 843-663-2607, FAX: 843-663-4158

**MANIFESTS FOR SCRAP  
METAL DISPOSAL**



ADVENT Environmental Inc.  
498 Wando Park Blvd.  
Mt. Pleasant, SC 29464

(843) 388-1851 Phone  
(843) 388-1891 Fax

---

Origination of recyclable materials:  
110 and 112 Birch Street, Laurel Bay MCAS-Beaufort, South Carolina.

Disposal Location: Beaufort County Public Works  
Solid Waste and Recycling Division  
120 Shanklin Road  
Beaufort, South Carolina 29906  
(843) 470-6406-Phone

I certify that the above scrap metal equipment has been properly cleaned (triple rinsed).

James Weezy  
PRINT (ADVENT REPRESENTATIVE)

[Signature] \_\_\_\_\_  
SIGNATURE DATE

I certify that the above tanks have been accepted and will be recycled by the Beaufort County Solid Waste and Recycling Division.

MARY B. AUSTIN  
PRINT (BCPW REPRESENTATIVE)

Mary B. Austin \_\_\_\_\_  
SIGNATURE DATE

BCPW Contact information:  
Gary Jones (843) 812-2052  
Darrell Hylton (843) 812-3864

**PROCTOR TESTING RESULTS**



# SOIL CONSULTANTS, INC.

DATE 6-14-05

PROJECT OR JOB NO.

05-14/2

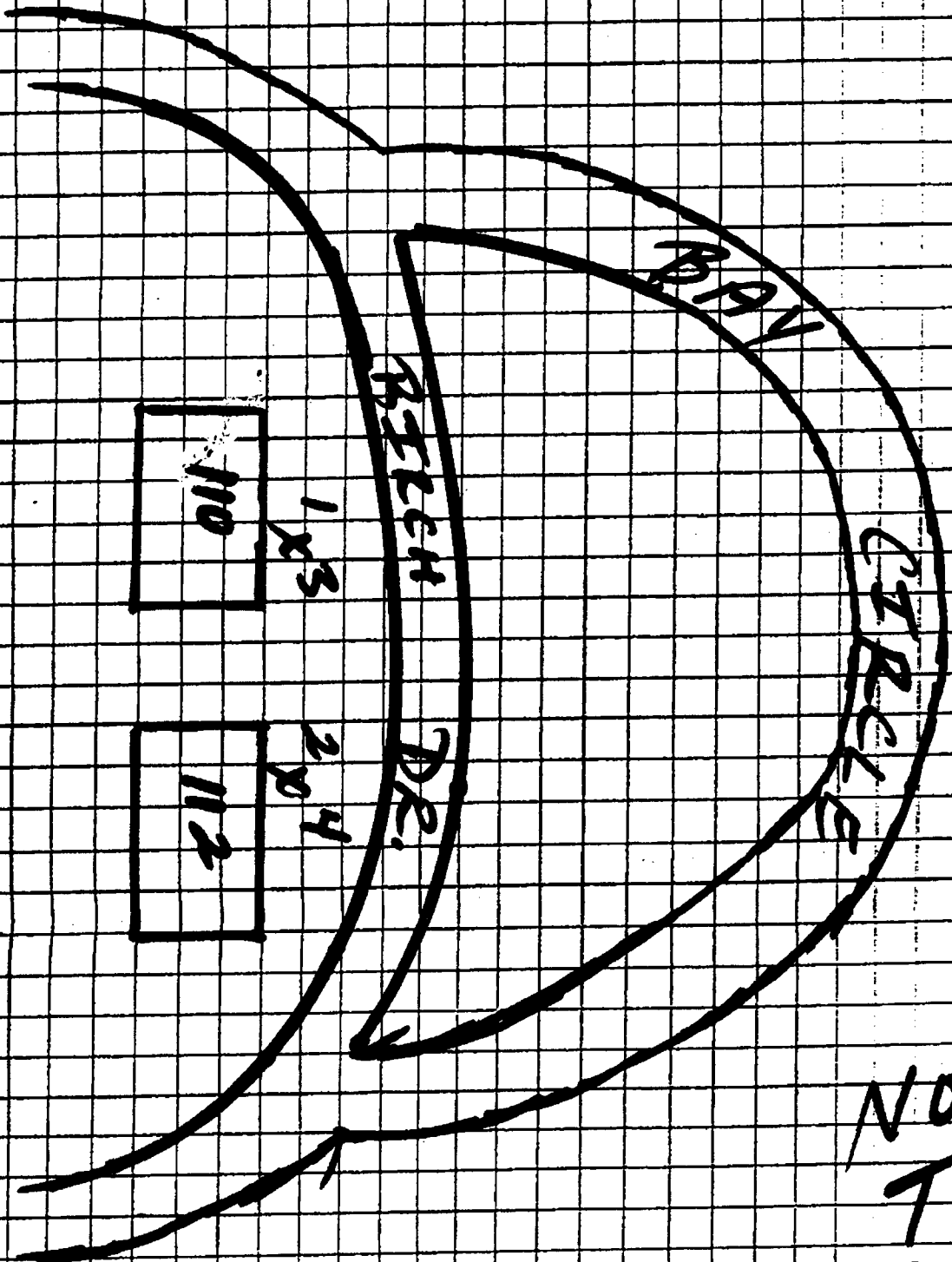
FORM 8C

TITLE

MCAB, Laurel Bay 110 + 112 Birch Dr.

INITIALS

LS



NOT TO SCALE

1/1



**ANALYTICAL RESULT SUMMARY PAGE**

Table 1: Summary of Soil Analytical Data  
 Housing 110 Birch Street MCAS Beaufort

Soil Results

Constituents	110L 6/13/2005		110R 6/13/2005		110B 6/13/2005	
	Result (ug/kg)	RBSL Clay Rich Soils (ug/kg)	Result (ug/kg)	RBSL Clay Rich Soils (ug/kg)	Result (ug/kg)	RBSL Clay Rich Soils (ug/kg)
<b>Volatile Organic Compounds</b>						
Benzene	ND	3	ND	3	ND	3
Toluene	ND	627	ND	627	ND	627
Ethylbenzene	ND	1551	ND	1551	6.4	1551
Xylenes	ND	13010	ND	13010	240	13010
Naphthalene	ND	47	ND	47	670.0	47
<b>Semi-Volatile Organic Compounds</b>						
Method 8270 (ug/kg)						
Benzo(a)anthracene	ND	66	ND	66	6900.0	66
Benzo(b)fluoranthene	ND	66	ND	66	2700.0	66
Benzo(k)fluoranthene	ND	66	ND	66	3500.0	66
Chrysene	ND	66	ND	66	3900.0	66
Dibenz(a,h)anthracene	ND	66	ND	66	ND	66

ND = Not detected/ Below the RBSLs  
 RBSL = Risked Based Screening Levels  
 ug/kg = micrograms per kilogram  
 ug/L = micrograms per Liter

**CHAIN OF CUSTODY AND ANALYTICAL  
RESULTS**



**Pace Analytical Services, Inc.**  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

**Pace Analytical Services, Inc.**  
2225 Riverside Drive  
Asheville, NC 28804  
Phone: 828.254.7176  
Fax: 828.252.4618

June 30, 2005

Mr. Hillery Douglas  
Earth Sciences, Inc.  
PO Box 71042  
Charleston, SC 29415

RE: Lab Project Number: 9296461  
Client Project ID: 05-512

Dear Mr. Douglas:

Enclosed are the analytical results for sample(s) received by the laboratory on June 14, 2005. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

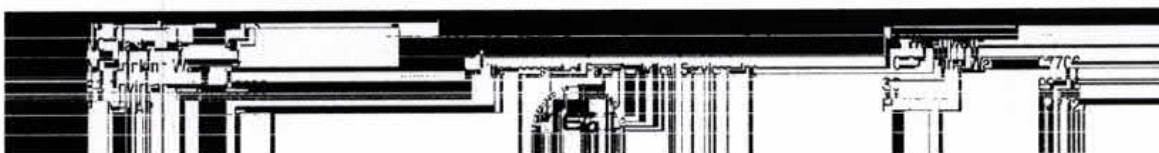
If you have any questions concerning this report please feel free to contact me.

Sincerely,



Richard Swartz  
Richard.Swartz@pacelabs.com  
Project Manager

Enclosures



Lab Project Number: 9296461

Client Project ID: 05-512

Solid results are reported on a dry weight basis

Lab Sample No: 925745986  
Client Sample ID: 112L

Project Sample Number: 9296461-001  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
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**Wet Chemistry**

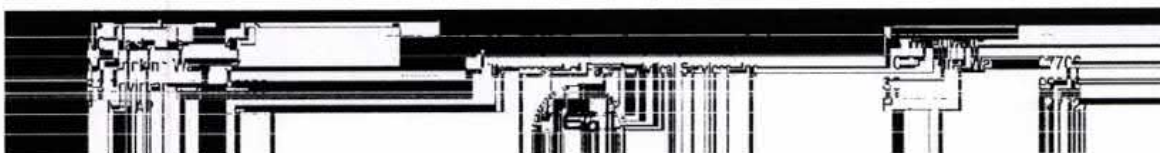
Percent Moisture	Method: % Moisture							
Percent Moisture	18.6	%		06/15/05 10:13	TNS			

**GC/MS Semivolatiles**

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	410	06/20/05 16:50	RPJ	83-32-9		
Acenaphthylene	ND	ug/kg	410	06/20/05 16:50	RPJ	208-96-8		
Anthracene	ND	ug/kg	410	06/20/05 16:50	RPJ	120-12-7		
Benzo(a)anthracene	ND	ug/kg	410	06/20/05 16:50	RPJ	56-55-3		
Benzo(a)pyrene	ND	ug/kg	410	06/20/05 16:50	RPJ	50-32-8		
Benzo(b)fluoranthene	ND	ug/kg	410	06/20/05 16:50	RPJ	205-99-2		
Benzo(g,h,i)perylene	ND	ug/kg	410	06/20/05 16:50	RPJ	191-24-2		
Benzo(k)fluoranthene	ND	ug/kg	410	06/20/05 16:50	RPJ	207-08-9		
Chrysene	ND	ug/kg	410	06/20/05 16:50	RPJ	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	410	06/20/05 16:50	RPJ	53-70-3		
Fluoranthene	ND	ug/kg	410	06/20/05 16:50	RPJ	206-44-0		
Fluorene	ND	ug/kg	410	06/20/05 16:50	RPJ	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	410	06/20/05 16:50	RPJ	193-39-5		
Naphthalene	ND	ug/kg	410	06/20/05 16:50	RPJ	91-20-3		
Phenanthrene	ND	ug/kg	410	06/20/05 16:50	RPJ	85-01-8		
Pyrene	ND	ug/kg	410	06/20/05 16:50	RPJ	129-00-0		
Nitrobenzene-d5 (S)	44	%		06/20/05 16:50	RPJ	4165-60-0		
2-Fluorobiphenyl (S)	42	%		06/20/05 16:50	RPJ	321-60-8		
Terphenyl-d14 (S)	69	%		06/20/05 16:50	RPJ	1718-51-0		
Date Extracted	06/15/05			06/15/05				

**GC/MS Volatiles**

GC/MS VOCs 5035/8260 low level	Method: EPA 8260							
Benzene	ND	ug/kg	6.1	06/18/05 21:44	MSF	71-43-2		
Ethylbenzene	ND	ug/kg	6.1	06/18/05 21:44	MSF	100-41-4		
Methyl-tert-butyl ether	ND	ug/kg	6.1	06/18/05 21:44	MSF	1634-04-4		
Naphthalene	ND	ug/kg	6.1	06/18/05 21:44	MSF	91-20-3		
Toluene	ND	ug/kg	6.1	06/18/05 21:44	MSF	108-88-3		
m&p-Xylene	ND	ug/kg	12.	06/18/05 21:44	MSF			
o-Xylene	ND	ug/kg	6.1	06/18/05 21:44	MSF	95-47-6		
Toluene-d8 (S)	98	%		06/18/05 21:44	MSF	2037-26-5		
4-Bromofluorobenzene (S)	86	%		06/18/05 21:44	MSF	460-00-4		





**Pace Analytical Services, Inc.**  
9800 Kinsey Avenue, Suite 100  
Huntersville, NC 28078  
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Fax: 704.875.9091

**Pace Analytical Services, Inc.**  
2225 Riverside Drive  
Asheville, NC 28804  
Phone: 828.254.7176  
Fax: 828.252.4618

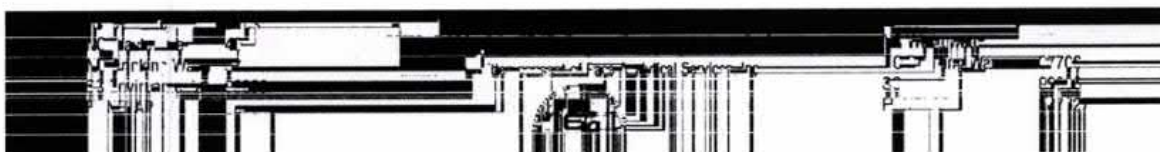
Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925745986  
Client Sample ID: 112L

Project Sample Number: 9296461-001  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
Dibromofluoromethane (S)	96	%		06/18/05 21:44	MSF	1868-53-7		
1,2-Dichloroethane-d4 (S)	88	%		06/18/05 21:44	MSF	17060-07-0		



Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925745994 Project Sample Number: 9296461-002 Date Collected: 06/13/05 13:00  
Client Sample ID: 112R Matrix: Soil Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
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**Wet Chemistry**

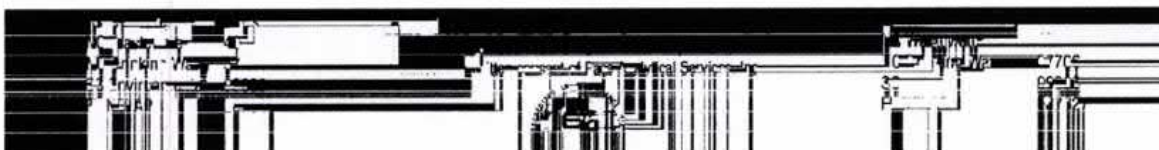
Percent Moisture	Method: % Moisture							
Percent Moisture	20.5	%		06/15/05 10:14	TNS			

**GC/MS Semivolatiles**

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	410	06/20/05 13:06	RPJ	83-32-9		
Acenaphthylene	ND	ug/kg	410	06/20/05 13:06	RPJ	208-96-8		
Anthracene	ND	ug/kg	410	06/20/05 13:06	RPJ	120-12-7		
Benzo(a)anthracene	ND	ug/kg	410	06/20/05 13:06	RPJ	56-55-3		
Benzo(a)pyrene	ND	ug/kg	410	06/20/05 13:06	RPJ	50-32-8		
Benzo(b)fluoranthene	ND	ug/kg	410	06/20/05 13:06	RPJ	205-99-2		
Benzo(g,h,i)perylene	ND	ug/kg	410	06/20/05 13:06	RPJ	191-24-2		
Benzo(k)fluoranthene	ND	ug/kg	410	06/20/05 13:06	RPJ	207-08-9		
Chrysene	ND	ug/kg	410	06/20/05 13:06	RPJ	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	410	06/20/05 13:06	RPJ	53-70-3		
Fluoranthene	ND	ug/kg	410	06/20/05 13:06	RPJ	206-44-0		
Fluorene	ND	ug/kg	410	06/20/05 13:06	RPJ	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	410	06/20/05 13:06	RPJ	193-39-5		
Naphthalene	ND	ug/kg	410	06/20/05 13:06	RPJ	91-20-3		
Phenanthrene	ND	ug/kg	410	06/20/05 13:06	RPJ	85-01-8		
Pyrene	ND	ug/kg	410	06/20/05 13:06	RPJ	129-00-0		
Nitrobenzene-d5 (S)	54	%		06/20/05 13:06	RPJ	4165-60-0		
2-Fluorobiphenyl (S)	56	%		06/20/05 13:06	RPJ	321-60-8		
Terphenyl-d14 (S)	66	%		06/20/05 13:06	RPJ	1718-51-0		
Date Extracted	06/15/05			06/15/05				

**GC/MS Volatiles**

GC/MS VOCs 5035/8260 low level	Method: EPA 8260							
Benzene	ND	ug/kg	6.3	06/18/05 22:01	MSF	71-43-2		
Ethylbenzene	ND	ug/kg	6.3	06/18/05 22:01	MSF	100-41-4		
Methyl-tert-butyl ether	ND	ug/kg	6.3	06/18/05 22:01	MSF	1634-04-4		
Naphthalene	ND	ug/kg	6.3	06/18/05 22:01	MSF	91-20-3		
Toluene	ND	ug/kg	6.3	06/18/05 22:01	MSF	108-88-3		
m&p-Xylene	ND	ug/kg	13.	06/18/05 22:01	MSF			
o-Xylene	ND	ug/kg	6.3	06/18/05 22:01	MSF	95-47-6		
Toluene-d8 (S)	98	%		06/18/05 22:01	MSF	2037-26-5		
4-Bromofluorobenzene (S)	83	%		06/18/05 22:01	MSF	460-00-4		
Dibromofluoromethane (S)	96	%		06/18/05 22:01	MSF	1868-53-7		





**Pace Analytical Services, Inc.**  
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**Pace Analytical Services, Inc.**  
2225 Riverside Drive  
Asheville, NC 28804  
Phone: 828.254.7176  
Fax: 828.252.4618

Lab Project Number: 9296461

Client Project ID: 05-512

Lab Sample No: 925745994

Project Sample Number: 9296461-002

Date Collected: 06/13/05 13:00

Client Sample ID: 112R

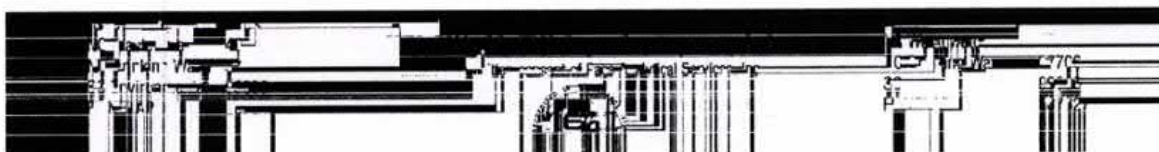
Matrix: Soil

Date Received: 06/14/05 10:20

<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Report Limit</u>	<u>Analyzed</u>	<u>By</u>	<u>CAS No.</u>	<u>Qual</u>	<u>ReqLmt</u>
1,2-Dichloroethane-d4 (S)	88	%		06/18/05 22:01	MSF	17060-07-0		

Date: 06/30/05

Page: 4 of 19





Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746000 Project Sample Number: 9296461-003 Date Collected: 06/13/05 13:00  
Client Sample ID: 112B Matrix: Soil Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
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**Wet Chemistry**

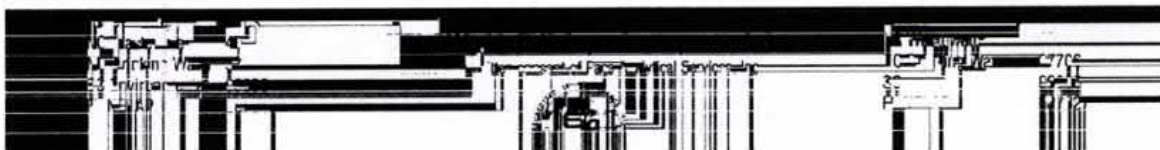
Percent Moisture	Method: % Moisture							
Percent Moisture	12.7	%		06/15/05 10:15	TNS			

**GC/MS Semivolatiles**

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	380	06/20/05 13:40	RPJ	83-32-9		
Acenaphthylene	ND	ug/kg	380	06/20/05 13:40	RPJ	208-96-8		
Anthracene	ND	ug/kg	380	06/20/05 13:40	RPJ	120-12-7		
Benzo(a)anthracene	ND	ug/kg	380	06/20/05 13:40	RPJ	56-55-3		
Benzo(a)pyrene	ND	ug/kg	380	06/20/05 13:40	RPJ	50-32-8		
Benzo(b)fluoranthene	ND	ug/kg	380	06/20/05 13:40	RPJ	205-99-2		
Benzo(g,h,i)perylene	ND	ug/kg	380	06/20/05 13:40	RPJ	191-24-2		
Benzo(k)fluoranthene	ND	ug/kg	380	06/20/05 13:40	RPJ	207-08-9		
Chrysene	ND	ug/kg	380	06/20/05 13:40	RPJ	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	380	06/20/05 13:40	RPJ	53-70-3		
Fluoranthene	ND	ug/kg	380	06/20/05 13:40	RPJ	206-44-0		
Fluorene	ND	ug/kg	380	06/20/05 13:40	RPJ	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	380	06/20/05 13:40	RPJ	193-39-5		
Naphthalene	ND	ug/kg	380	06/20/05 13:40	RPJ	91-20-3		
Phenanthrene	ND	ug/kg	380	06/20/05 13:40	RPJ	85-01-8		
Pyrene	ND	ug/kg	380	06/20/05 13:40	RPJ	129-00-0		
Nitrobenzene-d5 (S)	37	%		06/20/05 13:40	RPJ	4165-60-0		
2-Fluorobiphenyl (S)	34	%		06/20/05 13:40	RPJ	321-60-8		
Terphenyl-d14 (S)	37	%		06/20/05 13:40	RPJ	1718-51-0		
Date Extracted	06/15/05			06/15/05				

**GC/MS Volatiles**

GC/MS VOCs 5035/8260 low level	Method: EPA 8260							
Benzene	ND	ug/kg	5.7	06/19/05 22:54	MSF	71-43-2		
Ethylbenzene	ND	ug/kg	5.7	06/19/05 22:54	MSF	100-41-4		
Methyl-tert-butyl ether	ND	ug/kg	5.7	06/19/05 22:54	MSF	1634-04-4		
Naphthalene	ND	ug/kg	5.7	06/19/05 22:54	MSF	91-20-3		
Toluene	ND	ug/kg	5.7	06/19/05 22:54	MSF	108-88-3		
m&p-Xylene	ND	ug/kg	11.	06/19/05 22:54	MSF			
o-Xylene	ND	ug/kg	5.7	06/19/05 22:54	MSF	95-47-6		
Toluene-d8 (S)	95	%		06/19/05 22:54	MSF	2037-26-5		
4-Bromofluorobenzene (S)	89	%		06/19/05 22:54	MSF	460-00-4		
Dibromofluoromethane (S)	98	%		06/19/05 22:54	MSF	1868-53-7		





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Phone: 828.254.7176  
Fax: 828.252.4618

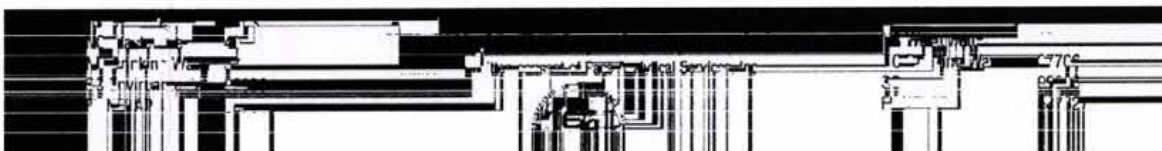
Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746000  
Client Sample ID: 112B

Project Sample Number: 9296461-003  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Report Limit</u>	<u>Analyzed</u>	<u>By</u>	<u>CAS No.</u>	<u>Qual</u>	<u>ReqLmt</u>
1,2-Dichloroethane-d4 (S)	88	%		06/19/05 22:54	MSF	17060-07-0		



Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746018      Project Sample Number: 9296461-004      Date Collected: 06/13/05 13:00  
Client Sample ID: 110L      Matrix: Soil      Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
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**Wet Chemistry**

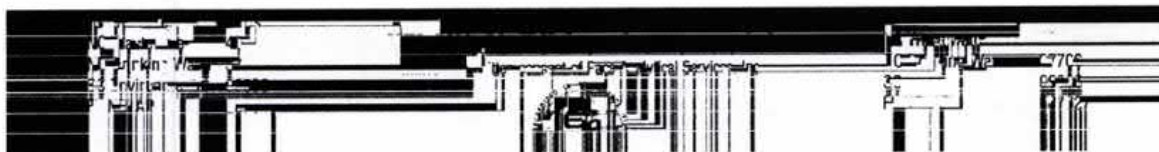
Percent Moisture	Method: % Moisture							
Percent Moisture	15.2	%		06/15/05 10:15	TNS			

**GC/MS Semivolatiles**

Semivolatile Organics		Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	390	06/20/05 14:15	RPJ	83-32-9		
Acenaphthylene	ND	ug/kg	390	06/20/05 14:15	RPJ	208-96-8		
Anthracene	ND	ug/kg	390	06/20/05 14:15	RPJ	120-12-7		
Benzo(a)anthracene	ND	ug/kg	390	06/20/05 14:15	RPJ	56-55-3		
Benzo(a)pyrene	ND	ug/kg	390	06/20/05 14:15	RPJ	50-32-8		
Benzo(b)fluoranthene	ND	ug/kg	390	06/20/05 14:15	RPJ	205-99-2		
Benzo(g,h,i)perylene	ND	ug/kg	390	06/20/05 14:15	RPJ	191-24-2		
Benzo(k)fluoranthene	ND	ug/kg	390	06/20/05 14:15	RPJ	207-08-9		
Chrysene	ND	ug/kg	390	06/20/05 14:15	RPJ	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	390	06/20/05 14:15	RPJ	53-70-3		
Fluoranthene	ND	ug/kg	390	06/20/05 14:15	RPJ	206-44-0		
Fluorene	ND	ug/kg	390	06/20/05 14:15	RPJ	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	390	06/20/05 14:15	RPJ	193-39-5		
Naphthalene	ND	ug/kg	390	06/20/05 14:15	RPJ	91-20-3		
Phenanthrene	ND	ug/kg	390	06/20/05 14:15	RPJ	85-01-8		
Pyrene	ND	ug/kg	390	06/20/05 14:15	RPJ	129-00-0		
Nitrobenzene-d5 (S)	42	%		06/20/05 14:15	RPJ	4165-60-0		
2-Fluorobiphenyl (S)	38	%		06/20/05 14:15	RPJ	321-60-8		
Terphenyl-d14 (S)	41	%		06/20/05 14:15	RPJ	1718-51-0		
Date Extracted	06/15/05			06/15/05				

**GC/MS Volatiles**

GC/MS VOCs 5035/8260 low level		Method: EPA 8260						
Benzene	ND	ug/kg	5.9	06/19/05 23:11	MSF	71-43-2		
Ethylbenzene	ND	ug/kg	5.9	06/19/05 23:11	MSF	100-41-4		
Methyl-tert-butyl ether	ND	ug/kg	5.9	06/19/05 23:11	MSF	1634-04-4		
Naphthalene	12.	ug/kg	5.9	06/19/05 23:11	MSF	91-20-3		
Toluene	ND	ug/kg	5.9	06/19/05 23:11	MSF	108-88-3		
m&p-Xylene	ND	ug/kg	12.	06/19/05 23:11	MSF			
o-Xylene	ND	ug/kg	5.9	06/19/05 23:11	MSF	95-47-6		
Toluene-d8 (S)	98	%		06/19/05 23:11	MSF	2037-26-5		
4-Bromofluorobenzene (S)	112	%		06/19/05 23:11	MSF	460-00-4		
Dibromofluoromethane (S)	135	%		06/19/05 23:11	MSF	1868-53-7		





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Phone: 828.254.7176  
Fax: 828.252.4618

Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746018  
Client Sample ID: 110L

Project Sample Number: 9296461-004  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichloroethane-d4 (S)	151	%		06/19/05 23:11	MSF	17060-07-0		







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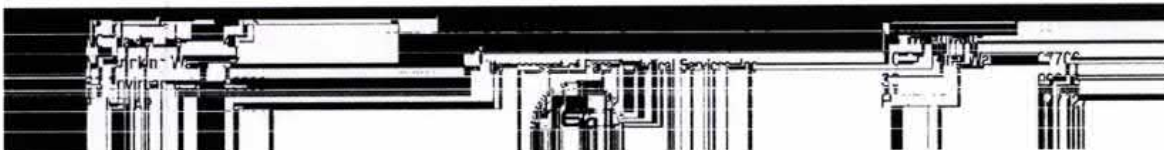
Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746026  
Client Sample ID: 110R

Project Sample Number: 9296461-005  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
1,2-Dichloroethane-d4 (S)	92	%		06/18/05 22:36	MSF	17060-07-0		



Lab Project Number: 9296461  
Client Project ID: 05-512

Lab Sample No: 925746034  
Client Sample ID: 110B

Project Sample Number: 9296461-006  
Matrix: Soil

Date Collected: 06/13/05 13:00  
Date Received: 06/14/05 10:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
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**Wet Chemistry**

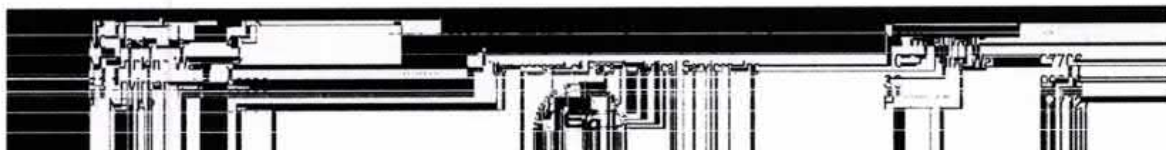
Percent Moisture	Method: % Moisture							
Percent Moisture	21.6	%		06/15/05 10:15	TNS			

**GC/MS Semivolatiles**

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	420	06/20/05 15:24	RPJ	83-32-9		
Acenaphthylene	ND	ug/kg	420	06/20/05 15:24	RPJ	208-96-8		
Anthracene	1600	ug/kg	420	06/20/05 15:24	RPJ	120-12-7		
Benzo(a)anthracene	6900	ug/kg	4200	06/20/05 15:24	RPJ	56-55-3		
Benzo(a)pyrene	2700	ug/kg	420	06/20/05 15:24	RPJ	50-32-8		
Benzo(b)fluoranthene	3500	ug/kg	420	06/20/05 15:24	RPJ	205-99-2		
Benzo(g,h,i)perylene	ND	ug/kg	420	06/20/05 15:24	RPJ	191-24-2		
Benzo(k)fluoranthene	4100	ug/kg	420	06/20/05 15:24	RPJ	207-08-9		
Chrysene	3900	ug/kg	420	06/20/05 15:24	RPJ	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	420	06/20/05 15:24	RPJ	53-70-3		
Fluoranthene	17000	ug/kg	4200	06/20/05 15:24	RPJ	206-44-0		
Fluorene	1700	ug/kg	420	06/20/05 15:24	RPJ	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	420	06/20/05 15:24	RPJ	193-39-5		
Naphthalene	1600	ug/kg	420	06/20/05 15:24	RPJ	91-20-3		
Phenanthrene	10000	ug/kg	4200	06/20/05 15:24	RPJ	85-01-8		
Pyrene	16000	ug/kg	4200	06/20/05 15:24	RPJ	129-00-0		
Nitrobenzene-d5 (S)	48	%		06/20/05 15:24	RPJ	4165-60-0		
2-Fluorobiphenyl (S)	35	%		06/20/05 15:24	RPJ	321-60-8		
Terphenyl-d14 (S)	67	%		06/20/05 15:24	RPJ	1718-51-0		
Date Extracted	06/15/05			06/15/05				

**GC/MS Volatiles**

GC/MS VOCs 5035/8260 low level	Method: EPA 8260							
Benzene	ND	ug/kg	6.4	06/18/05 22:53	MSF	71-43-2		
Ethylbenzene	6.4	ug/kg	6.4	06/18/05 22:53	MSF	100-41-4		
Methyl-tert-butyl ether	ND	ug/kg	6.4	06/18/05 22:53	MSF	1634-04-4		
Naphthalene	670	ug/kg	6.4	06/18/05 22:53	MSF	91-20-3		
Toluene	ND	ug/kg	6.4	06/18/05 22:53	MSF	108-88-3		
m&p-Xylene	130	ug/kg	13.	06/18/05 22:53	MSF			
o-Xylene	110	ug/kg	6.4	06/18/05 22:53	MSF	95-47-6		
Toluene-d8 (S)	83	%		06/18/05 22:53	MSF	2037-26-5		
4-Bromofluorobenzene (S)	79	%		06/18/05 22:53	MSF	460-00-4		
Dibromofluoromethane (S)	136	%		06/18/05 22:53	MSF	1868-53-7		





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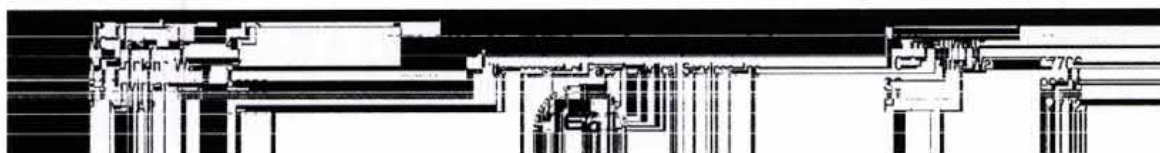
Lab Project Number: 9296461
Client Project ID: 05-512

Lab Sample No: 925746034
Client Sample ID: 110B

Project Sample Number: 9296461-006
Matrix: Soil

Date Collected: 06/13/05 13:00
Date Received: 06/14/05 10:20

Table with 9 columns: Parameters, Results, Units, Report Limit, Analyzed, By, CAS No., Qual, ReqLmt. Row 1: 1,2-Dichloroethane-d4 (S), 121, %, 06/18/05 22:53 MSF, 17060-07-0







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Lab Project Number: 9296461  
Client Project ID: 05-512

**PARAMETER FOOTNOTES**

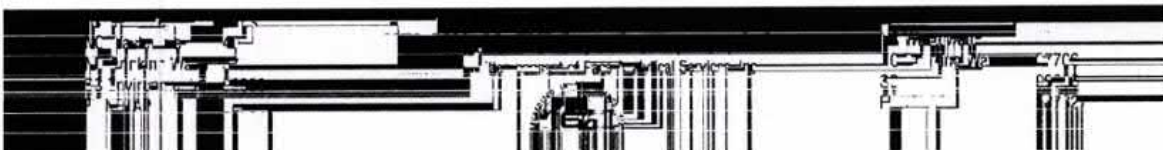
Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate





**QUALITY CONTROL DATA**

Lab Project Number: 9296461  
Client Project ID: 05-512

LABORATORY CONTROL SAMPLE: 925752586

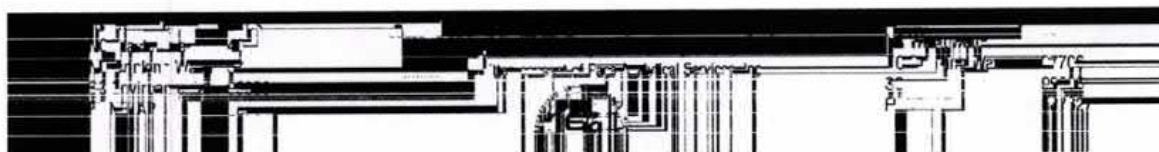
Parameter	Units	Spike	LCS	LCS	Footnotes
		Conc.	Result	% Rec	
Benzo(a)anthracene	ug/kg	1667.00	1291	77	
Benzo(g,h,i)perylene	ug/kg	1667.00	1966	118	
Benzo(a)pyrene	ug/kg	1667.00	1285	77	
Chrysene	ug/kg	1667.00	1283	77	
Dibenz(a,h)anthracene	ug/kg	1667.00	1303	78	
Fluoranthene	ug/kg	1667.00	1235	74	
Fluorene	ug/kg	1667.00	1323	79	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	1303	78	
Naphthalene	ug/kg	1667.00	1198	72	
Phenanthrene	ug/kg	1667.00	1283	77	
Pyrene	ug/kg	1667.00	1285	77	
Nitrobenzene-d5 (S)				68	
2-Fluorobiphenyl (S)				77	
Terphenyl-d14 (S)				79	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 925752602 925752610

Parameter	Units	925743643	Spike	MS	MSD	MS	MSD	RPD	Footnotes
		Result	Conc.	Result	Result	% Rec	% Rec		
Acenaphthene	ug/kg	0	1769.00	1600	1801	90	102	12	
Pyrene	ug/kg	158.6	1769.00	1565	1668	80	85	6	
Nitrobenzene-d5 (S)						76	82		
2-Fluorobiphenyl (S)						71	82		
Terphenyl-d14 (S)						78	82		

SAMPLE DUPLICATE: 925752594

Parameter	Units	925743635	DUP	RPD	Footnotes
		Result	Result		
Acenaphthene	ug/kg	ND	ND	NC	
Acenaphthylene	ug/kg	ND	ND	NC	
Anthracene	ug/kg	ND	ND	NC	
Benzo(k)fluoranthene	ug/kg	ND	ND	NC	
Benzo(b)fluoranthene	ug/kg	ND	ND	NC	
Benzo(a)anthracene	ug/kg	ND	ND	NC	

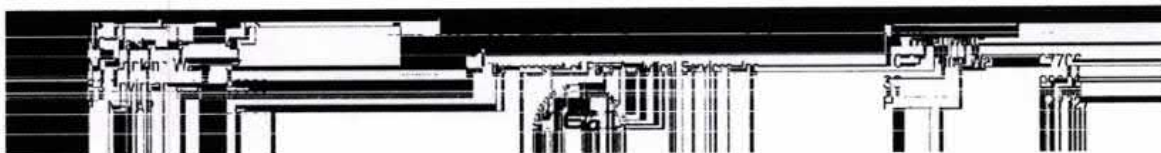


**QUALITY CONTROL DATA**

Lab Project Number: 9296461  
Client Project ID: 05-512

SAMPLE DUPLICATE: 925752594

Parameter	Units	925743635	DUP	RPD	Footnotes
		Result	Result		
Benzo(g,h,i)perylene	ug/kg	ND	ND	NC	
Benzo(a)pyrene	ug/kg	ND	ND	NC	
Chrysene	ug/kg	ND	ND	NC	
Dibenz(a,h)anthracene	ug/kg	ND	ND	NC	
Fluoranthene	ug/kg	ND	ND	NC	
Fluorene	ug/kg	940.0	1100	16	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	900.0	1500	47	1
Phenanthrene	ug/kg	3000	3600	18	
Pyrene	ug/kg	550.0	630.0	13	
Nitrobenzene-d5 (S)	%	116	130		2
2-Fluorobiphenyl (S)	%	55	61		
Terphenyl-d14 (S)	%	74	76		





**QUALITY CONTROL DATA**

Lab Project Number: 9296461  
Client Project ID: 05-512

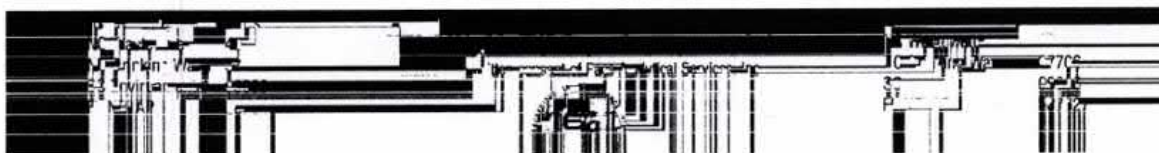
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QC Batch: 130550	Analysis Method: % Moisture				
QC Batch Method:	Analysis Description: Percent Moisture				
Associated Lab Samples:	925745986	925745994	925746000	925746018	925746026
	925746034				

---

SAMPLE DUPLICATE: 925750820

<u>Parameter</u>	<u>Units</u>	925748733	DUP	<u>RPD</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Result</u>		
Percent Moisture	%	32.30	32.20	0	





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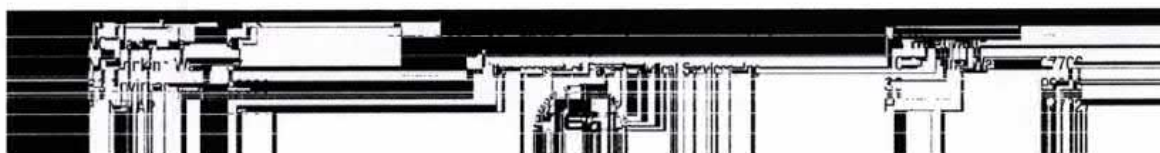
**Pace Analytical Services, Inc.**  
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Asheville, NC 28804  
Phone: 828.254.7176  
Fax: 828.252.4618

Lab Project Number: 9296461  
Client Project ID: 05-512

**QUALITY CONTROL DATA PARAMETER FOOTNOTES**

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- DUP Sample Duplicate
- ND Not detected at or above adjusted reporting limit
- NC Not Calculable
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- MDL Adjusted Method Detection Limit
- RPD Relative Percent Difference
- (S) Surrogate
- [1] The calculated RPD was outside QC acceptance limits.
- [2] Base/neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.



**Appendix C**  
**Laboratory Analytical Report – Soil – Tier 2 Assessment**





**ENVIRONMENTAL  
SCIENCE CORP.**

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Mt. Juliet, TN 37122  
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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

November 29, 2006

Date Received : November 17, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110 SB02 4-6 FT  
Collected By : Shaun Malin  
Collection Date : 11/14/06 10:10

ESC Sample # : L269613-01

Site ID :

Project # : 06-501

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	83.5		%	2540G	11/24/06	1
Benzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Toluene	BDL	0.0060	mg/kg	8260B	11/28/06	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	11/28/06	1
Naphthalene	BDL	0.0060	mg/kg	8260B	11/28/06	1
Surrogate Recovery						
Toluene-d8	84.0		% Rec.	8260B	11/28/06	1
Dibromofluoromethane	82.0		% Rec.	8260B	11/28/06	1
4-Bromofluorobenzene	96.6		% Rec.	8260B	11/28/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.040	mg/kg	8270C	11/27/06	1
Acenaphthene	BDL	0.040	mg/kg	8270C	11/27/06	1
Acenaphthylene	BDL	0.040	mg/kg	8270C	11/27/06	1
Benzo(a)anthracene	BDL	0.040	mg/kg	8270C	11/27/06	1
Benzo(a)pyrene	BDL	0.040	mg/kg	8270C	11/27/06	1
Benzo(b)fluoranthene	BDL	0.040	mg/kg	8270C	11/27/06	1
Benzo(g,h,i)perylene	BDL	0.040	mg/kg	8270C	11/27/06	1
Benzo(k)fluoranthene	BDL	0.040	mg/kg	8270C	11/27/06	1
Chrysene	BDL	0.040	mg/kg	8270C	11/27/06	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	11/27/06	1
Fluoranthene	BDL	0.040	mg/kg	8270C	11/27/06	1
Fluorene	BDL	0.040	mg/kg	8270C	11/27/06	1
Indeno(1,2,3-cd)pyrene	BDL	0.040	mg/kg	8270C	11/27/06	1
Naphthalene	BDL	0.040	mg/kg	8270C	11/27/06	1
Phenanthrene	BDL	0.040	mg/kg	8270C	11/27/06	1
Pyrene	BDL	0.040	mg/kg	8270C	11/27/06	1
Surrogate Recovery						
Nitrobenzene-d5	76.9		% Rec.	8270C	11/27/06	1
2-Fluorobiphenyl	94.3		% Rec.	8270C	11/27/06	1
p-Terphenyl-d14	94.3		% Rec.	8270C	11/27/06	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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Est. 1970

REPORT OF ANALYSIS

November 29, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 17, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110 SB03 4-6 FT  
Collected By : Shaun Malin  
Collection Date : 11/14/06 11:45

ESC Sample # : L269613-02

Site ID :

Project # : 06-501

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	83.8		%	2540G	11/24/06	1
Benzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Toluene	BDL	0.0060	mg/kg	8260B	11/28/06	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	11/28/06	1
Naphthalene	BDL	0.0060	mg/kg	8260B	11/28/06	1
Surrogate Recovery						
Toluene-d8	83.0		% Rec.	8260B	11/28/06	1
Dibromofluoromethane	83.9		% Rec.	8260B	11/28/06	1
4-Bromofluorobenzene	93.5		% Rec.	8260B	11/28/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.039	mg/kg	8270C	11/27/06	1
Acenaphthene	BDL	0.039	mg/kg	8270C	11/27/06	1
Acenaphthylene	BDL	0.039	mg/kg	8270C	11/27/06	1
Benzo(a)anthracene	BDL	0.039	mg/kg	8270C	11/27/06	1
Benzo(a)pyrene	BDL	0.039	mg/kg	8270C	11/27/06	1
Benzo(b)fluoranthene	BDL	0.039	mg/kg	8270C	11/27/06	1
Benzo(g,h,i)perylene	BDL	0.039	mg/kg	8270C	11/27/06	1
Benzo(k)fluoranthene	BDL	0.039	mg/kg	8270C	11/27/06	1
Chrysene	BDL	0.039	mg/kg	8270C	11/27/06	1
Dibenz(a,h)anthracene	BDL	0.039	mg/kg	8270C	11/27/06	1
Fluoranthene	BDL	0.039	mg/kg	8270C	11/27/06	1
Fluorene	BDL	0.039	mg/kg	8270C	11/27/06	1
Indeno(1,2,3-cd)pyrene	BDL	0.039	mg/kg	8270C	11/27/06	1
Naphthalene	BDL	0.039	mg/kg	8270C	11/27/06	1
Phenanthrene	BDL	0.039	mg/kg	8270C	11/27/06	1
Pyrene	BDL	0.039	mg/kg	8270C	11/27/06	1
Surrogate Recovery						
Nitrobenzene-d5	57.0		% Rec.	8270C	11/27/06	1
2-Fluorobiphenyl	77.5		% Rec.	8270C	11/27/06	1
p-Terphenyl-d14	89.3		% Rec.	8270C	11/27/06	1

Results listed are dry weight basis.

BDL - Below Detection Limit

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REPORT OF ANALYSIS

November 29, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 17, 2006  
Description : 06-501 Tier II Laurel Bay

Sample ID : 110 SB01 2-4 FT

Collected By : Shaun Malin  
Collection Date : 11/15/06 11:30

ESC Sample # : L269613-03

Site ID :

Project # : 06-501

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	88.0		%	2540G	11/24/06	1
Benzene	BDL	0.0011	mg/kg	8260B	11/28/06	1
Toluene	BDL	0.0057	mg/kg	8260B	11/28/06	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	11/28/06	1
Xylenes, Total	0.0070	0.0034	mg/kg	8260B	11/28/06	1
Naphthalene	0.14	0.0057	mg/kg	8260B	11/28/06	1
Surrogate Recovery						
Toluene-d8	82.8		% Rec.	8260B	11/28/06	1
Dibromofluoromethane	85.2		% Rec.	8260B	11/28/06	1
4-Bromofluorobenzene	113.		% Rec.	8260B	11/28/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.19	0.038	mg/kg	8270C	11/27/06	1
Acenaphthene	0.16	0.038	mg/kg	8270C	11/27/06	1
Acenaphthylene	0.049	0.038	mg/kg	8270C	11/27/06	1
Benzo(a)anthracene	0.10	0.038	mg/kg	8270C	11/27/06	1
Benzo(a)pyrene	0.047	0.038	mg/kg	8270C	11/27/06	1
Benzo(b)fluoranthene	0.10	0.038	mg/kg	8270C	11/27/06	1
Benzo(g,h,i)perylene	BDL	0.038	mg/kg	8270C	11/27/06	1
Benzo(k)fluoranthene	BDL	0.038	mg/kg	8270C	11/27/06	1
Chrysene	0.12	0.038	mg/kg	8270C	11/27/06	1
Dibenz(a,h)anthracene	BDL	0.038	mg/kg	8270C	11/27/06	1
Fluoranthene	0.22	0.038	mg/kg	8270C	11/27/06	1
Fluorene	0.29	0.038	mg/kg	8270C	11/27/06	1
Indeno(1,2,3-cd)pyrene	BDL	0.038	mg/kg	8270C	11/27/06	1
Naphthalene	0.088	0.038	mg/kg	8270C	11/27/06	1
Phenanthrene	0.79	0.038	mg/kg	8270C	11/27/06	1
Pyrene	0.23	0.038	mg/kg	8270C	11/27/06	1
Surrogate Recovery						
Nitrobenzene-d5	102.		% Rec.	8270C	11/27/06	1
2-Fluorobiphenyl	96.8		% Rec.	8270C	11/27/06	1
p-Terphenyl-d14	91.6		% Rec.	8270C	11/27/06	1

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**REPORT OF ANALYSIS**

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

November 29, 2006

Date Received : November 17, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110 SB04 2-6 F  
Collected By : Shaun Malin  
Collection Date : 11/16/06 10:45

ESC Sample # : L269613-05

Site ID :

Project # : 06-501

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	81.1		%	2540G	11/24/06	1
Benzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Toluene	BDL	0.0062	mg/kg	8260B	11/28/06	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	11/28/06	1
Xylenes, Total	BDL	0.0037	mg/kg	8260B	11/28/06	1
Naphthalene	BDL	0.0062	mg/kg	8260B	11/28/06	1
Surrogate Recovery						
Toluene-d8	82.0		% Rec.	8260B	11/28/06	1
Dibromofluoromethane	74.9		% Rec.	8260B	11/28/06	1
4-Bromofluorobenzene	89.4		% Rec.	8260B	11/28/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.041	mg/kg	8270C	11/27/06	1
Acenaphthene	BDL	0.041	mg/kg	8270C	11/27/06	1
Acenaphthylene	BDL	0.041	mg/kg	8270C	11/27/06	1
Benzo(a)anthracene	BDL	0.041	mg/kg	8270C	11/27/06	1
Benzo(a)pyrene	BDL	0.041	mg/kg	8270C	11/27/06	1
Benzo(b)fluoranthene	BDL	0.041	mg/kg	8270C	11/27/06	1
Benzo(g,h,i)perylene	BDL	0.041	mg/kg	8270C	11/27/06	1
Benzo(k)fluoranthene	BDL	0.041	mg/kg	8270C	11/27/06	1
Chrysene	BDL	0.041	mg/kg	8270C	11/27/06	1
Dibenz(a,h)anthracene	BDL	0.041	mg/kg	8270C	11/27/06	1
Fluoranthene	BDL	0.041	mg/kg	8270C	11/27/06	1
Fluorene	BDL	0.041	mg/kg	8270C	11/27/06	1
Indeno(1,2,3-cd)pyrene	BDL	0.041	mg/kg	8270C	11/27/06	1
Naphthalene	BDL	0.041	mg/kg	8270C	11/27/06	1
Phenanthrene	BDL	0.041	mg/kg	8270C	11/27/06	1
Pyrene	BDL	0.041	mg/kg	8270C	11/27/06	1
Surrogate Recovery						
Nitrobenzene-d5	82.4		% Rec.	8270C	11/27/06	1
2-Fluorobiphenyl	93.0		% Rec.	8270C	11/27/06	1
p-Terphenyl-d14	96.7		% Rec.	8270C	11/27/06	1

Results listed are dry weight basis.

BDL - Below Detection Limit

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**Appendix D**  
**Laboratory Analytical Report - Groundwater**



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REPORT OF ANALYSIS

December 01, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 21, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110MW01  
Collected By : Shaun Malin  
Collection Date : 11/20/06 11:00

ESC Sample # : L269962-01

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	BDL	10.	ppb	8015M	11/29/06	1
Nitrate	BDL	100	ug/l	9056	11/21/06	1
Sulfate	11000	5000	ug/l	9056	11/21/06	1
Free Carbon Dioxide	7400	20.	ug/l	406B	11/22/06	1
Dissolved Oxygen	BDL	3.0		360.1	11/21/06	1
Ferrous Iron	BDL	50.	ug/l	3500Fe-B	11/21/06	1
Lead	BDL	5.0	ug/l	6010B	11/27/06	1
Volatile Organics						
Benzene	BDL	1.0	ug/l	8260B	12/01/06	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	12/01/06	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/01/06	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/01/06	1
Naphthalene	BDL	5.0	ug/l	8260B	12/01/06	1
Toluene	BDL	5.0	ug/l	8260B	12/01/06	1
Xylenes, Total	BDL	3.0	ug/l	8260B	12/01/06	1
Surrogate Recovery						
Toluene-d8	96.3		% Rec.	8260B	12/01/06	1
Dibromofluoromethane	111.		% Rec.	8260B	12/01/06	1
4-Bromofluorobenzene	113.		% Rec.	8260B	12/01/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	11/24/06	1
Acenaphthene	BDL	1.0	ug/l	8270C	11/24/06	1
Acenaphthylene	BDL	1.0	ug/l	8270C	11/24/06	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	11/24/06	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	11/24/06	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	11/24/06	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	11/24/06	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	11/24/06	1
Chrysene	BDL	1.0	ug/l	8270C	11/24/06	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	11/24/06	1
Fluoranthene	BDL	1.0	ug/l	8270C	11/24/06	1
Fluorene	BDL	1.0	ug/l	8270C	11/24/06	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	11/24/06	1
Naphthalene	BDL	1.0	ug/l	8270C	11/24/06	1
Phenanthrene	BDL	1.0	ug/l	8270C	11/24/06	1
Pyrene	BDL	1.0	ug/l	8270C	11/24/06	1
Surrogate Recovery						

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

December 01, 2006

Date Received : November 21, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110MW01  
Collected By : Shaun Malin  
Collection Date : 11/20/06 11:00

ESC Sample # : L269962-01

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Nitrobenzene-d5	80.0		% Rec.	8270C	11/24/06	1
2-Fluorobiphenyl	78.8		% Rec.	8270C	11/24/06	1
p-Terphenyl-d14	103.		% Rec.	8270C	11/24/06	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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REPORT OF ANALYSIS

December 01, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 21, 2006  
Description : 06-501 Tier II Laurel Bay

Sample ID : 110MW04

Collected By : Shaun Malin  
Collection Date : 11/20/06 13:30

ESC Sample # : L269962-02

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	BDL	10.	ppb	8015M	11/29/06	1
Nitrate	BDL	100	ug/l	9056	11/21/06	1
Sulfate	31000	5000	ug/l	9056	11/21/06	1
Free Carbon Dioxide	120000	20.	ug/l	406B	11/22/06	1
Dissolved Oxygen	BDL	3.0		360.1	11/21/06	1
Ferrous Iron	3400	250	ug/l	3500Fe-B	11/21/06	5
Lead	57.	5.0	ug/l	6010B	11/27/06	1
Volatile Organics						
Benzene	BDL	1.0	ug/l	8260B	12/01/06	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	12/01/06	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/01/06	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/01/06	1
Naphthalene	BDL	5.0	ug/l	8260B	12/01/06	1
Toluene	BDL	5.0	ug/l	8260B	12/01/06	1
Xylenes, Total	BDL	3.0	ug/l	8260B	12/01/06	1
Surrogate Recovery						
Toluene-d8	95.3		% Rec.	8260B	12/01/06	1
Dibromofluoromethane	108.		% Rec.	8260B	12/01/06	1
4-Bromofluorobenzene	107.		% Rec.	8260B	12/01/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	11/29/06	1
Acenaphthene	BDL	1.0	ug/l	8270C	11/29/06	1
Acenaphthylene	BDL	1.0	ug/l	8270C	11/29/06	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	11/29/06	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	11/29/06	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	11/29/06	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	11/29/06	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	11/29/06	1
Chrysene	BDL	1.0	ug/l	8270C	11/29/06	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	11/29/06	1
Fluoranthene	BDL	1.0	ug/l	8270C	11/29/06	1
Fluorene	BDL	1.0	ug/l	8270C	11/29/06	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	11/29/06	1
Naphthalene	BDL	1.0	ug/l	8270C	11/29/06	1
Phenanthrene	BDL	1.0	ug/l	8270C	11/29/06	1
Pyrene	BDL	1.0	ug/l	8270C	11/29/06	1
Surrogate Recovery						

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit (PQL)





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REPORT OF ANALYSIS

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

December 01, 2006

Date Received : November 21, 2006  
Description : 06-501 Tier II Laurel Bay

ESC Sample # : L269962-02

Sample ID : 110MW04

Site ID :

Collected By : Shaun Malin  
Collection Date : 11/20/06 13:30

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Nitrobenzene-d5	78.8		% Rec.	8270C	11/29/06	1
2-Fluorobiphenyl	86.7		% Rec.	8270C	11/29/06	1
p-Terphenyl-d14	95.5		% Rec.	8270C	11/29/06	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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**REPORT OF ANALYSIS**

November 28, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 18, 2006  
Description : 06-501 Tier II Laurel Bay

Sample ID : 110MW02

Collected By : Shaun Malin  
Collection Date : 11/17/06 10:00

ESC Sample # : L269791-01

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	BDL	10.	ppb	8015M	11/20/06	1
Nitrate	3800	100	ug/l	9056	11/18/06	1
Sulfate	20000	5000	ug/l	9056	11/18/06	1
Free Carbon Dioxide	110000	20.	ug/l	406B	11/22/06	1
Dissolved Oxygen	BDL	3.0		360.1	11/18/06	1
Ferrous Iron	1500	50.	ug/l	3500Fe-B	11/18/06	1
Lead	12.	5.0	ug/l	6010B	11/26/06	1
Benzene	BDL	1.0	ug/l	8260B	11/23/06	1
Toluene	BDL	5.0	ug/l	8260B	11/23/06	1
Ethylbenzene	BDL	1.0	ug/l	8260B	11/23/06	1
Total Xylenes	BDL	3.0	ug/l	8260B	11/23/06	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	11/23/06	1
Naphthalene	BDL	5.0	ug/l	8260B	11/23/06	1
Surrogate Recovery						
Toluene-d8	86.5		% Rec.	8260B	11/23/06	1
Dibromofluoromethane	89.7		% Rec.	8260B	11/23/06	1
4-Bromofluorobenzene	79.3		% Rec.	8260B	11/23/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Acenaphthene	BDL	1.0	ug/l	8270C	11/22/06	1
Acenaphthylene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Chrysene	BDL	1.0	ug/l	8270C	11/22/06	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Fluorene	BDL	1.0	ug/l	8270C	11/22/06	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Naphthalene	BDL	1.0	ug/l	8270C	11/22/06	1
Phenanthrene	BDL	1.0	ug/l	8270C	11/22/06	1
Pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Surrogate Recovery						
Nitrobenzene-d5	97.4		% Rec.	8270C	11/22/06	1
2-Fluorobiphenyl	96.7		% Rec.	8270C	11/22/06	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit (PQL)



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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

November 28, 2006

Date Received : November 18, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110MW02  
Collected By : Shaun Malin  
Collection Date : 11/17/06 10:00

ESC Sample # : L269791-01

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
p-Terphenyl-d14	170.		% Rec.	8270C	11/22/06	1
Ethylene Dibromide	BDL	0.010	ug/l	8011	11/22/06	1
1,2-Dibromo-3-Chloropropane	BDL	0.020	ug/l	8011	11/22/06	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/28/06 11:35 Revised: 11/28/06 16:01



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**REPORT OF ANALYSIS**

November 28, 2006

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

Date Received : November 18, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110MW03  
Collected By : Shaun Malin  
Collection Date : 11/17/06 12:00

ESC Sample # : L269791-02

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	BDL	10.	ppb	8015M	11/20/06	1
Nitrate	2900	100	ug/l	9056	11/18/06	1
Sulfate	21000	5000	ug/l	9056	11/18/06	1
Free Carbon Dioxide	86000	20.	ug/l	406B	11/22/06	1
Dissolved Oxygen	BDL	3.0		360.1	11/18/06	1
Ferrous Iron	1300	50.	ug/l	3500Fe-B	11/18/06	1
Lead	9.8	5.0	ug/l	6010B	11/26/06	1
Benzene	BDL	1.0	ug/l	8260B	11/23/06	1
Toluene	BDL	5.0	ug/l	8260B	11/23/06	1
Ethylbenzene	BDL	1.0	ug/l	8260B	11/23/06	1
Total Xylenes	BDL	3.0	ug/l	8260B	11/23/06	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	11/23/06	1
Naphthalene	BDL	5.0	ug/l	8260B	11/23/06	1
Surrogate Recovery						
Toluene-d8	87.9		% Rec.	8260B	11/23/06	1
Dibromofluoromethane	90.2		% Rec.	8260B	11/23/06	1
4-Bromofluorobenzene	80.9		% Rec.	8260B	11/23/06	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Acenaphthene	BDL	1.0	ug/l	8270C	11/22/06	1
Acenaphthylene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270C	11/22/06	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Chrysene	BDL	1.0	ug/l	8270C	11/22/06	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270C	11/22/06	1
Fluoranthene	BDL	1.0	ug/l	8270C	11/22/06	1
Fluorene	BDL	1.0	ug/l	8270C	11/22/06	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Naphthalene	BDL	1.0	ug/l	8270C	11/22/06	1
Phenanthrene	BDL	1.0	ug/l	8270C	11/22/06	1
Pyrene	BDL	1.0	ug/l	8270C	11/22/06	1
Surrogate Recovery						
Nitrobenzene-d5	124.		% Rec.	8270C	11/22/06	1
2-Fluorobiphenyl	93.2		% Rec.	8270C	11/22/06	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

Mr. Shaun Malin  
Advent Environmental - SC  
498 Wando Park Blvd., Suite 500  
Mt. Pleasant, SC 29464

November 28, 2006

Date Received : November 18, 2006  
Description : 06-501 Tier II Laurel Bay  
Sample ID : 110MW03  
Collected By : Shaun Malin  
Collection Date : 11/17/06 12:00

ESC Sample # : L269791-02

Site ID :

Project # : 06-501

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
p-Terphenyl-d14	136.		% Rec.	8270C	11/22/06	1
Ethylene Dibromide	BDL	0.010	ug/l	8011	11/22/06	1
1,2-Dibromo-3-Chloropropane	BDL	0.020	ug/l	8011	11/22/06	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit (PQL)  
Note:

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Reported: 11/28/06 11:35 Revised: 11/28/06 16:02

**Appendix E**  
**Regulatory Correspondence**

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

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7 November 2005

United States Marine Corps Air Station  
Attention: S-4 NREAO (A.G. Howard)  
P.O. Box 55001  
Beaufort, SC 29904-5001

Re: MCAS – Laurel Bay Housing – 110 Birch Street  
**Site ID # 03094**  
Tank Closure Report received 4 November 2005  
Beaufort County

Dear Ms. Howard:

The purpose of this letter is to verify a release of fuel oil at the referenced facility. 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 & soil removal, and soil sampling. Based on the information contained in the closure report, a violation of the South Carolina Pollution Control Act has occurred in that there has been an unauthorized release of petroleum to the environment.

Assessment and remediation activities in the vicinity of 110 Birch Street indicate that PAHs remain in soils in excess of established RBSL limits. Therefore, additional assessment or remedial measures are required for 110 Birch Street.

Please submit a proposal to conduct the necessary assessment and/or remedial measures at this site no later than 30 December 2005. Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or [bishopma@dhec.sc.gov](mailto:bishopma@dhec.sc.gov).

Sincerely,

Michael Bishop, Hydrogeologist  
Groundwater Quality Section  
Bureau of Water

cc: Region 8 District EQC  
Commander NAVFACENCOM Southern Division, Attn: Code ES24 (Gabriel Magwood), P.O. Box 190010, North  
Charleston, SC 29419-9010  
Technical File



April 27, 2017

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

RE: No Further Action  
110 Birch, Laurel Bay Military Housing Area

Dear Mr. Drawdy:

As part of the address by address status reconciliation between the South Carolina Department of Health and Environmental Control (DHEC) and your facility, DHEC reviewed previously received tank removal soil assessment and groundwater assessment reports for 110 Birch. The soil data required a groundwater investigation, however, no groundwater contamination was found on the property. No further investigation is required at this time at 110 Birch. 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).

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](mailto:petruslb@dhec.sc.gov) or 803-898-0294.

Sincerely,

Laurel Petrus, Environmental Engineer Associate  
RCRA Federal Facilities Section

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