SUMMARY REPORT
490 WEST DOVE LANE (FORMERLY 1433 WEST DOVE LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and

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

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

Table of Contents

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
PPV	Public-Private Venture
QAPP	Quality Assurance Program Plan
RBSL	risk-based screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	LBMH area at MCAS Beaufort, South Carolina
UFP SAP	Uniform Federal Policy Sampling and Analysis Plan
USEPA	United States Environmental Protection Agency
UST	underground storage tank
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 490 West Dove Lane (Formerly 1433 West Dove Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

In 2007, MCAS Beaufort began a voluntary program to remove the unregulated, residential USTs and conduct sampling activities to determine if, and to what extent, petroleum constituents may have impacted the surrounding environment. MCAS Beaufort coordinated with SCDHEC to develop removal procedures that were consistent with procedural requirements for regulated USTs. All tank removal activities and follow-on actions are conducted in coordination with SCDHEC. To date, all known USTs have been removed from all residential properties within the LBMH area.

In 2015, the Public-Private Venture (PPV) responsible for the management of the residential area at LBMH initiated a plan to replace outdated homes in the LBMH area. The plan includes the demolition of existing homes and subsequent construction of new homes. In discussions with the PPV it was revealed that construction of the new homes could occur on portions of the property where the USTs were formerly located. In response to this plan, MCAS Beaufort assessed subsurface soil gas concentrations in the area of the former USTs at select properties within the demolition areas. The subject property of this report is one of the properties within the planned demolition area which was selected for a soil gas evaluation. It should be noted that the house at the subject property has since been demolished and this property is an empty lot. There are no current plans for construction in this area.

1.2 UST Removal and Assessment Process

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan*

(QAPP) for the Underground Storage Tank Management Division, Revision 3.1 (SCDHEC, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service,* (SCDHEC, 2018), are as follows:

- benzene, toluene, ethylbenzene, and xylenes (BTEX),
- naphthalene, and
- five select polynuclear aromatic hydrocarbon (PAHs): benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and dibenz(a,h)anthracene.

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management Division* (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The 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. A multi-media investigation selection process tree, applicable to the LBMH UST investigations, is presented as Appendix A.

In accordance with the multi-media investigation selection process (Appendix A), groundwater analytical results are typically compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion into existing homes and the necessity for an investigation associated with this media. However, as previously stated, this property did not have an existing home and instead was among those selected for an evaluation of soil gas because of the planned demolition and construction activities.

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 490 West Dove Lane (Formerly 1433 West Dove Lane). The sampling activities at 490 West Dove Lane (Formerly 1433 West Dove Lane) comprised a soil investigation, IGWA sampling, and a soil gas investigation. Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1433 West Dove Lane* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – February 2015* (Resolution Consultants, 2015). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C. Details regarding the vapor intrusion investigation at this site are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015). The laboratory report that includes the pertinent soil gas analytical results for this site is presented in Appendix D.

2.1 UST Removal and Soil Sampling

On April 8, 2013, a single 280 gallon heating oil UST was removed from the rear grassed area adjacent to the concrete patio at 490 West Dove Lane (Formerly 1433 West Dove Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'0" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report

presented in Appendix B. The laboratory analytical data report includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 490 West Dove Lane (Formerly 1433 West Dove Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated April 1, 2014, SCDHEC requested an IGWA for 490 West Dove Lane (Formerly 1433 West Dove Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix E.

2.3 Groundwater Sampling

On February 2, 2015, a temporary monitoring well was installed at 490 West Dove Lane (Formerly 1433 West Dove Lane), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February 2015* (Resolution Consultants, 2015).

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

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 490 West Dove Lane (Formerly 1433 West Dove Lane) 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.

2.5 Soil Gas Sampling

On October 3, 2014, a temporary subsurface soil gas well was installed at 490 West Dove Lane (Formerly 1433 West Dove Lane) in accordance with the SCDHEC approved *Uniform Federal Policy Sampling and Analysis Plan (UFP SAP) for Vapor Media* (Resolution Consultants, 2015). Soil gas sampling was conducted at this property to assess the potential risk for vapor intrusion associated with the possible construction of a new home on top of former the UST location. The soil gas well was placed in the same general location as the former heating oil UST and the IGWA sample location. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

The sampling strategy for this phase of the investigation required a one-time sampling event of the soil gas well. The subsurface soil gas well at 490 West Dove Lane (Formerly 1433 West Dove Lane) was sampled on October 8, 2014. A soil gas sample was collected and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of soil gas sampling, the temporary well was abandoned in accordance with the *UFP SAP) for Vapor Media* (Resolution Consultants, 2015). Field forms are provided in the *Technical Memorandum – Soil Gas Sampling Results – October 2014* (Resolution Consultants, 2015).

2.6 Soil Gas Analytical Results

A summary of the laboratory analytical results and USEPA (United States Environmental Protection Agency) VISLs is presented in Table 3. A copy of the laboratory analytical data report is included in Appendix D.

The soil gas results collected from 490 West Dove Lane (Formerly 1433 West Dove Lane) were below the USEPA VISLs, which indicated that subsurface soil gas was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

The house at 490 West Dove Lane (Formerly 1433 West Dove Lane) was demolished and the property is an empty lot. There are no current plans for construction in this area. Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 490 West Dove Lane (Formerly 1433 West Dove Lane). The NFA determination for groundwater was obtained in a letter dated May 5, 2015. Based on the analytical results for soil gas, it was determined that there was not a vapor intrusion concern at this property and a recommendation was made for no additional vapor intrusion assessment activities. SCDHEC approved the no further vapor intrusion investigation recommendation for 490 West Dove Lane (Formerly 1433 West Dove Lane) in a letter dated March 10, 2015. SCDHEC's letters are provided in Appendix E.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1433 Albatross Drive, Laurel Bay Military Housing Area*, October 2013.

Resolution Consultants, 2015. *Initial Groundwater Investigation Report – February 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2015.

Resolution Consultants, 2015. *Technical Memorandum – Soil Gas Sampling Results – October 2014 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, January 2015.

Resolution Consultants, 2015. *Uniform Federal Policy Sampling and Analysis Plan for Vapor Media, for Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, February 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 2.0*, April 2013.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.0*, May 2015.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division*, Revision 3.1*, February 2016.

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

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

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

United States Environmental Protection Agency, 2014. *USEPA OSWER Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator, Version 3.3.1* May 2014.

Tables

Table 1
Laboratory Analytical Results - Soil
490 West Dove Lane (Formerly 1433 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [(1)]	Results Sample Collected 04/08/13
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.007	ND
Ethylbenzene	1.15	**0.177**
Naphthalene	0.036	**16.8**
Toluene	1.45	**0.00358**
Xylenes, Total	14.5	**0.605**
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	**0.0808**
Benzo(b)fluoranthene	0.66	**0.0521**
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	**0.0769**
Dibenz(a,h)anthracene	0.66	ND

Notes:

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

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
490 West Dove Lane (Formerly 1433 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [(1)]	Site-Specific Groundwater VISLs (µg/L)[(2)]	Results Sample Collected 02/02/15
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	**0.85**
Naphthalene	25	29.33	**11**
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	**4.2**
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	**0.20**
Benzo(b)fluoranthene	10	NA	**0.20**
Benzo(k)fluoranthene	10	NA	**0.077**
Chrysene	10	NA	**0.22**
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

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

Table 3
Laboratory Analytical Results - Vapor
490 West Dove Lane (Formerly 1433 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	USEPA VISL [(1)]	Results Sample Collected 10/08/14
Volatile Organic Compounds Analyzed by USEPA Method TO-15 (µg/m^3)		
Benzene	12	**0.35**
Toluene	17000	**0.34**
Ethylbenzene	37	ND
m,p-Xylenes	350	ND
o-Xylene	350	ND
Naphthalene	2.8	ND

Notes:

[(1)] United States Environmental Protection Agency Exterior Soil Gas Vapor Intrusion Screening Level (VISL) from VISL Calculator (Version 3.3.1, May 2014).

VISLs are based on a residual exposure scenario and a target risk level of $1x10^{-6}$ and a hazard quotient of 0.1.

Bold font indicates the analyte was detected.

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

USEPA - United States Environmental Protection Agency

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

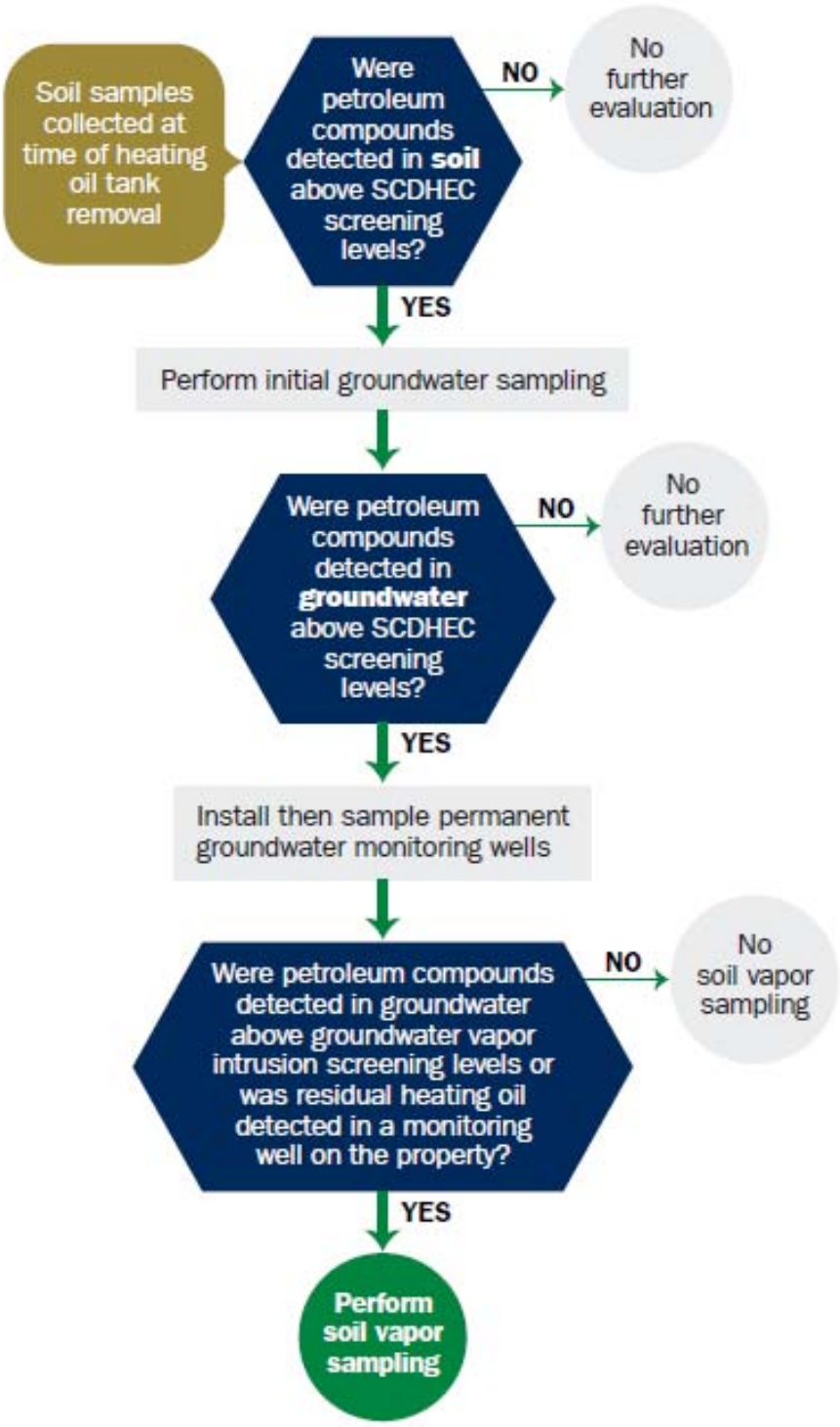
RBSL - Risk-Based Screening Level

µg/m^3 - micrograms per cubic meter

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

rec 10/23/2013

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) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
Mailing Address

Beaufort,	South Carolina	29904-5001
City	State	Zip Code

843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier

1433 Dove Lane, Laurel Bay Military Housing Area
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

_____
Name (Type or print.)

_____
Signature

To be completed by Notary Public:

Sworn before me this _____ day of_____, 20____

_____
(Name)

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

VI. UST INFORMATION

1433Dove				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'				
No				
No				
Removed				
4/8/2013				
Yes				
Yes				

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.....

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1433Dove was removed from the ground and disposed at a Subtitle "D" landfill. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1433Dove had been previously filled with sand by others.

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

VII. PIPING INFORMATION

1433Dove				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

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.....

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

Corrosion and pitting were found on the surface of the steel vent pipe. The copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1433 Dove	Excav at fill end	Soil	Sandy	6'	4/8/13 1530 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *stormwater canal If yes, indicate type of receptor, distance, and direction on site map.	*X	
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 site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable, fiber optic & geothermal If yes, indicate the type of utility, distance, and direction on the site map.	*X	
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.		X

XIII. SITE MAP

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

(Attach Site Map Here)

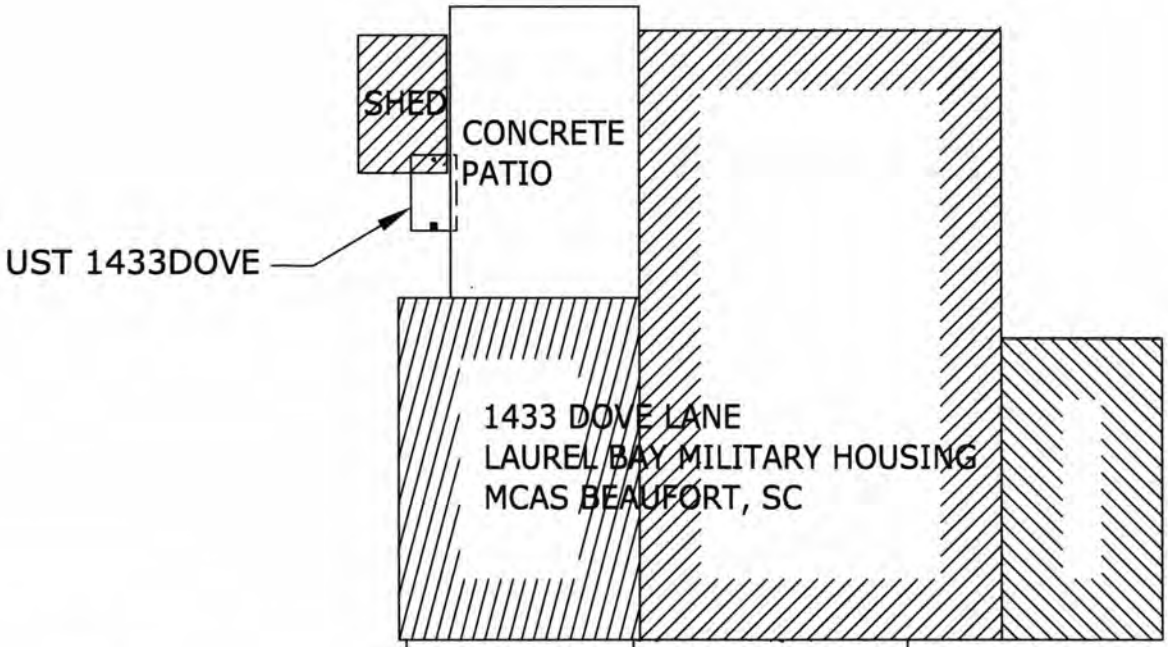
SBG-EEG, Inc.
7301 Rivers Ave., Suite 245
N. Charleston SC 29406-9643
Ph. (843) 573-7140

Drawn By: L. DiAsio

Dwg Date: May 2013

FIGURE 1: LOCATION MAP
1433 DOVE LANE
LAUREL BAY, BEAUFORT SC

STORMWATER CANAL ≈ 820'



GRAPHIC SCALE

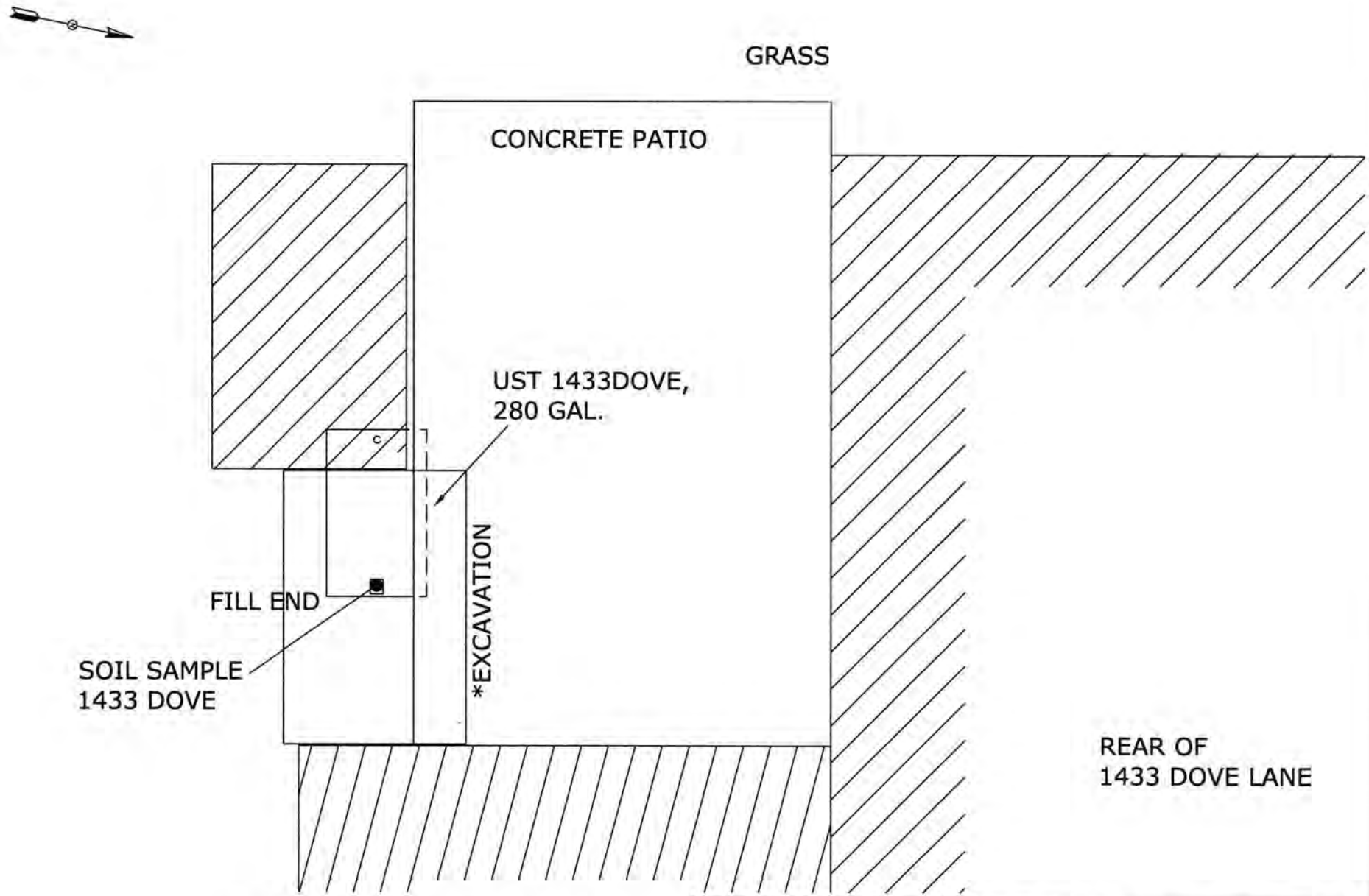
0 5' 10' 20'

DEPTH BELOW GRADE
1433DOVE = 36"

SBG-EEG
7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 2 SITE MAP
1433 DOVE LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE MAY 2013



GRAPHIC SCALE
0 5'

* A PORTION OF THE CONCRETE PATIO WAS REMOVED TO FACILITATE TANK EXTRACTION.

SBG-EEG
7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 3 UST SAMPLE LOCATIONS
1433 DOVE LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE MAY 2013

Picture 1: Location of UST 1433Dove.

Picture 2: UST 1433Dove excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC	UST 1433Dove						
Benzene	ND						
Toluene	0.00358 mg/kg						
Ethylbenzene	0.177 mg/kg						
Xylenes	0.605 mg/kg						
Naphthalene	16.8 mg/kg						
Benzo (a) anthracene	0.0808 mg/kg						
Benzo (b) fluoranthene	0.0521 mg/kg						
Benzo (k) fluoranthene	ND						
Chrysene	0.0769 mg/kg						
Dibenz (a, h) anthracene	ND						
TPH (EPA 3550)							

CoC								
Benzene								
Toluene								
Ethylbenzene								
Xylenes								
Naphthalene								
Benzo (a) anthracene								
Benzo (b) fluoranthene								
Benzo (k) fluoranthene								
Chrysene								
Dibenz (a, h) anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

XV. ANALYTICAL RESULTS

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-24495-1
Client Project/Site: Laurel Bay Housing Project

For:
Environmental Enterprise Group
10179 Highway 78
Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Authorized for release by:
4/30/2013 11:49:21 AM

Ken Hayes
Project Manager I
ken.hayes@testamericainc.com

Table of Contents

Sample Summary

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-24495-1	1433 Dove	Solid	04/08/13 15:30	04/17/13 08:30
490-24495-2	1435-2 Dove	Solid	04/09/13 15:30	04/17/13 08:30
490-24495-3	590 Aster	Solid	04/10/13 14:15	04/17/13 08:30
490-24495-4	642 Dahlia-2	Solid	04/11/13 14:15	04/17/13 08:30
490-24495-5	1422 Albatross	Solid	04/08/13 13:45	04/17/13 08:30
490-24495-6	1418 Albatross	Solid	04/09/13 15:30	04/17/13 08:30
490-24495-7	591 Aster	Solid	04/10/13 14:45	04/17/13 08:30
490-24495-8	434 Elderberry	Solid	04/11/13 11:45	04/17/13 08:30

Case Narrative

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Job ID: 490-24495-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-24495-1

Comments
No additional comments.

Receipt
The samples were received on 4/17/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC/MS VOA
Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 1418 Albatross (490-24495-6), 1433 Dove (490-24495-1), 1435-2 Dove (490-24495-2).

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 1433 Dove (490-24495-1), 1435-2 Dove (490-24495-2), 1418 Albatross (490-24495-6), SB-2-13 (0-2) (490-24512-6), SB-2-13 (0-2) (490-24512-6 MS), SB-2-13 (0-2) (490-24512-6 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 74074.

No other analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Definitions/Glossary

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 1433 Dove
Date Collected: 04/08/13 15:30
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-1
Matrix: Solid
Percent Solids: 77.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00231	0.000775	mg/Kg	☼	04/17/13 20:15	04/19/13 16:28	1
Ethylbenzene	0.177		0.00231	0.000775	mg/Kg	☼	04/17/13 20:15	04/19/13 16:28	1
Naphthalene	16.8		0.760	0.259	mg/Kg	☼	04/17/13 20:10	04/22/13 23:44	2
Toluene	0.00358		0.00231	0.000856	mg/Kg	☼	04/17/13 20:15	04/19/13 16:28	1
Xylenes, Total	0.605		0.00578	0.000775	mg/Kg	☼	04/17/13 20:15	04/19/13 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*04/17/13 20:10*	*04/22/13 23:44*	*2*
4-Bromofluorobenzene (Surr)	*956*	*X*	*70 - 130*	*04/17/13 20:15*	*04/19/13 16:28*	*1*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*04/17/13 20:10*	*04/22/13 23:44*	*2*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:28*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*04/17/13 20:10*	*04/22/13 23:44*	*2*
Toluene-d8 (Surr)	*112*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:28*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*04/17/13 20:10*	*04/22/13 23:44*	*2*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.182		0.0860	0.0128	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Acenaphthylene	0.147		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Anthracene	0.165		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Benzo[a]anthracene	0.0808	J	0.0860	0.0193	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Benzo[a]pyrene	ND		0.0860	0.0154	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Benzo[b]fluoranthene	0.0521	J	0.0860	0.0154	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Benzo[g,h,i]perylene	ND		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Benzo[k]fluoranthene	ND		0.0860	0.0180	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
1-Methylnaphthalene	5.17		0.344	0.0719	mg/Kg	☼	04/18/13 12:55	04/19/13 18:06	4
Pyrene	0.280		0.0860	0.0154	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Phenanthrene	1.41		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Chrysene	0.0769	J	0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Dibenz(a,h)anthracene	ND		0.0860	0.00899	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Fluoranthene	0.257		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Fluorene	0.841		0.0860	0.0154	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Indeno[1,2,3-cd]pyrene	ND		0.0860	0.0128	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
Naphthalene	1.47		0.0860	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 20:17	1
2-Methylnaphthalene	7.93		0.344	0.0822	mg/Kg	☼	04/18/13 12:55	04/19/13 18:06	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*	*04/18/13 12:55*	*04/18/13 20:17*	*1*
Terphenyl-d14 (Surr)	*77*		*13 - 120*	*04/18/13 12:55*	*04/18/13 20:17*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*04/18/13 12:55*	*04/18/13 20:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 1435-2 Dove
Date Collected: 04/09/13 15:30
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-2
Matrix: Solid
Percent Solids: 80.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0222		0.00214	0.000717	mg/Kg	☼	04/17/13 20:15	04/19/13 16:55	1
Ethylbenzene	3.21		0.138	0.0470	mg/Kg	☼	04/17/13 20:10	04/22/13 17:25	1
Naphthalene	23.8		6.91	2.35	mg/Kg	☼	04/17/13 20:10	04/22/13 17:52	20
Toluene	0.0190		0.00214	0.000792	mg/Kg	☼	04/17/13 20:15	04/19/13 16:55	1
Xylenes, Total	8.51		0.346	0.0470	mg/Kg	☼	04/17/13 20:10	04/22/13 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:52*	*20*
4-Bromofluorobenzene (Surr)	*1302*	*X*	*70 - 130*	*04/17/13 20:15*	*04/19/13 16:55*	*1*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:25*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:52*	*20*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:55*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:25*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:52*	*20*
Toluene-d8 (Surr)	*118*		*70 - 130*	*04/17/13 20:15*	*04/19/13 16:55*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:25*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*	*04/17/13 20:10*	*04/22/13 17:52*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.221		0.0828	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Acenaphthylene	0.142		0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Anthracene	0.115		0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Benzo[a]anthracene	ND		0.0828	0.0185	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Benzo[a]pyrene	ND		0.0828	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Benzo[b]fluoranthene	ND		0.0828	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Benzo[g,h,i]perylene	ND		0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Benzo[k]fluoranthene	ND		0.0828	0.0173	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
1-Methylnaphthalene	4.12		0.0828	0.0173	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Pyrene	0.125		0.0828	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Phenanthrene	1.36		0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Chrysene	0.0586	J	0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Dibenz(a,h)anthracene	ND		0.0828	0.00865	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Fluoranthene	0.0584	J	0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Fluorene	0.678		0.0828	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Indeno[1,2,3-cd]pyrene	ND		0.0828	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
Naphthalene	1.03		0.0828	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 20:39	1
2-Methylnaphthalene	5.56		0.166	0.0395	mg/Kg	☼	04/18/13 12:55	04/19/13 18:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*04/18/13 12:55*	*04/18/13 20:39*	*1*
Terphenyl-d14 (Surr)	*92*		*13 - 120*	*04/18/13 12:55*	*04/18/13 20:39*	*1*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*	*04/18/13 12:55*	*04/18/13 20:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10	0.10	%			04/18/13 11:20	1

Client Sample Results

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 590 Aster

Date Collected: 04/10/13 14:15
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-3

Matrix: Solid
Percent Solids: 95.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00236	0.000790	mg/Kg	☼	04/17/13 20:15	04/22/13 16:04	1
Ethylbenzene	ND		0.00236	0.000790	mg/Kg	☼	04/17/13 20:15	04/22/13 16:04	1
Naphthalene	ND		0.00589	0.00200	mg/Kg	☼	04/17/13 20:15	04/22/13 16:04	1
Toluene	ND		0.00236	0.000872	mg/Kg	☼	04/17/13 20:15	04/22/13 16:04	1
Xylenes, Total	ND		0.00589	0.000790	mg/Kg	☼	04/17/13 20:15	04/22/13 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:04*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:04*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:04*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:04*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0678	0.0101	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Acenaphthylene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Anthracene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Benzo[a]anthracene	ND		0.0678	0.0152	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Benzo[a]pyrene	ND		0.0678	0.0122	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Benzo[b]fluoranthene	ND		0.0678	0.0122	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Benzo[g,h,i]perylene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Benzo[k]fluoranthene	ND		0.0678	0.0142	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
1-Methylnaphthalene	ND		0.0678	0.0142	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Pyrene	ND		0.0678	0.0122	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Phenanthrene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Chrysene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Dibenz(a,h)anthracene	ND		0.0678	0.00709	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Fluoranthene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Fluorene	ND		0.0678	0.0122	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0678	0.0101	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
Naphthalene	ND		0.0678	0.00911	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1
2-Methylnaphthalene	ND		0.0678	0.0162	mg/Kg	☼	04/18/13 12:55	04/18/13 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 120*	*04/18/13 12:55*	*04/18/13 21:02*	*1*
Terphenyl-d14 (Surr)	*73*		*13 - 120*	*04/18/13 12:55*	*04/18/13 21:02*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 120*	*04/18/13 12:55*	*04/18/13 21:02*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 642 Dahlia-2
Date Collected: 04/11/13 14:15
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-4
Matrix: Solid
Percent Solids: 79.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00211	0.000707	mg/Kg	☼	04/17/13 20:15	04/19/13 17:49	1
Ethylbenzene	ND		0.00211	0.000707	mg/Kg	☼	04/17/13 20:15	04/19/13 17:49	1
Naphthalene	ND		0.00527	0.00179	mg/Kg	☼	04/17/13 20:15	04/19/13 17:49	1
Toluene	ND		0.00211	0.000780	mg/Kg	☼	04/17/13 20:15	04/19/13 17:49	1
Xylenes, Total	ND		0.00527	0.000707	mg/Kg	☼	04/17/13 20:15	04/19/13 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*04/17/13 20:15*	*04/19/13 17:49*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/17/13 20:15*	*04/19/13 17:49*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*04/17/13 20:15*	*04/19/13 17:49*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*04/17/13 20:15*	*04/19/13 17:49*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0833	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Acenaphthylene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Anthracene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Benzo[a]anthracene	ND		0.0833	0.0186	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Benzo[a]pyrene	ND		0.0833	0.0149	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Benzo[b]fluoranthene	ND		0.0833	0.0149	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Benzo[g,h,i]perylene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Benzo[k]fluoranthene	ND		0.0833	0.0174	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
1-Methylnaphthalene	ND		0.0833	0.0174	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Pyrene	ND		0.0833	0.0149	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Phenanthrene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Chrysene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Dibenz(a,h)anthracene	ND		0.0833	0.00870	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Fluoranthene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Fluorene	ND		0.0833	0.0149	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Indeno[1,2,3-cd]pyrene	ND		0.0833	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
Naphthalene	ND		0.0833	0.0112	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1
2-Methylnaphthalene	ND		0.0833	0.0199	mg/Kg	☼	04/18/13 12:55	04/18/13 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*04/18/13 12:55*	*04/18/13 21:24*	*1*
Terphenyl-d14 (Surr)	*94*		*13 - 120*	*04/18/13 12:55*	*04/18/13 21:24*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*04/18/13 12:55*	*04/18/13 21:24*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 1422 Albatross
Date Collected: 04/08/13 13:45
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-5
Matrix: Solid
Percent Solids: 76.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00213	0.000714	mg/Kg	☼	04/17/13 20:15	04/19/13 18:16	1
Ethylbenzene	ND		0.00213	0.000714	mg/Kg	☼	04/17/13 20:15	04/19/13 18:16	1
Naphthalene	ND		0.00533	0.00181	mg/Kg	☼	04/17/13 20:15	04/19/13 18:16	1
Toluene	ND		0.00213	0.000789	mg/Kg	☼	04/17/13 20:15	04/19/13 18:16	1
Xylenes, Total	ND		0.00533	0.000714	mg/Kg	☼	04/17/13 20:15	04/19/13 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:16*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:16*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:16*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0867	0.0129	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Acenaphthylene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Anthracene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Benzo[a]anthracene	ND		0.0867	0.0194	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Benzo[a]pyrene	ND		0.0867	0.0155	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Benzo[b]fluoranthene	ND		0.0867	0.0155	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Benzo[g,h,i]perylene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Benzo[k]fluoranthene	ND		0.0867	0.0181	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
1-Methylnaphthalene	ND		0.0867	0.0181	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Pyrene	ND		0.0867	0.0155	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Phenanthrene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Chrysene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Dibenz(a,h)anthracene	ND		0.0867	0.00906	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Fluoranthene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Fluorene	ND		0.0867	0.0155	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Indeno[1,2,3-cd]pyrene	ND		0.0867	0.0129	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
Naphthalene	ND		0.0867	0.0116	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1
2-Methylnaphthalene	ND		0.0867	0.0207	mg/Kg	☼	04/18/13 12:55	04/18/13 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*29 - 120*	*04/18/13 12:55*	*04/18/13 21:46*	*1*
Terphenyl-d14 (Surr)	*77*		*13 - 120*	*04/18/13 12:55*	*04/18/13 21:46*	*1*
Nitrobenzene-d5 (Surr)	*57*		*27 - 120*	*04/18/13 12:55*	*04/18/13 21:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	76		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 1418 Albatross
Date Collected: 04/09/13 15:30
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-6
Matrix: Solid
Percent Solids: 77.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00293		0.00215	0.000720	mg/Kg	¤	04/17/13 20:15	04/19/13 18:43	1
Ethylbenzene	0.975		0.136	0.0462	mg/Kg	¤	04/17/13 20:10	04/22/13 18:19	1
Naphthalene	5.81		0.340	0.116	mg/Kg	¤	04/17/13 20:10	04/22/13 18:19	1
Toluene	0.00736		0.00215	0.000795	mg/Kg	¤	04/17/13 20:15	04/19/13 18:43	1
Xylenes, Total	4.14		0.340	0.0462	mg/Kg	¤	04/17/13 20:10	04/22/13 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*	*04/17/13 20:10*	*04/22/13 18:19*	*1*
4-Bromofluorobenzene (Surr)	*804*	*X*	*70 - 130*	*04/17/13 20:15*	*04/19/13 18:43*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/17/13 20:10*	*04/22/13 18:19*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:43*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*04/17/13 20:10*	*04/22/13 18:19*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*	*04/17/13 20:15*	*04/19/13 18:43*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*04/17/13 20:10*	*04/22/13 18:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.225		0.0852	0.0127	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Acenaphthylene	0.144		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Anthracene	0.342		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Benzo[a]anthracene	0.870		0.0852	0.0191	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Benzo[a]pyrene	0.334		0.0852	0.0153	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Benzo[b]fluoranthene	0.571		0.0852	0.0153	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Benzo[g,h,i]perylene	0.103		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Benzo[k]fluoranthene	0.230		0.0852	0.0178	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
1-Methylnaphthalene	3.88		0.0852	0.0178	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Pyrene	2.07		0.0852	0.0153	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Phenanthrene	2.73		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Chrysene	0.745		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Dibenz(a,h)anthracene	ND		0.0852	0.00890	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Fluoranthene	2.19		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Fluorene	0.735		0.0852	0.0153	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Indeno[1,2,3-cd]pyrene	0.0905		0.0852	0.0127	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
Naphthalene	0.998		0.0852	0.0114	mg/Kg	¤	04/18/13 12:55	04/18/13 22:08	1
2-Methylnaphthalene	5.50		0.170	0.0407	mg/Kg	¤	04/18/13 12:55	04/19/13 18:50	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*29 - 120*	*04/18/13 12:55*	*04/18/13 22:08*	*1*
Terphenyl-d14 (Surr)	*93*		*13 - 120*	*04/18/13 12:55*	*04/18/13 22:08*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*04/18/13 12:55*	*04/18/13 22:08*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 591 Aster
Date Collected: 04/10/13 14:45
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-7
Matrix: Solid
Percent Solids: 96.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00222	0.000745	mg/Kg	☼	04/17/13 20:15	04/22/13 16:31	1
Ethylbenzene	ND		0.00222	0.000745	mg/Kg	☼	04/17/13 20:15	04/22/13 16:31	1
Naphthalene	ND		0.00556	0.00189	mg/Kg	☼	04/17/13 20:15	04/22/13 16:31	1
Toluene	ND		0.00222	0.000823	mg/Kg	☼	04/17/13 20:15	04/22/13 16:31	1
Xylenes, Total	ND		0.00556	0.000745	mg/Kg	☼	04/17/13 20:15	04/22/13 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:31*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:31*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*04/17/13 20:15*	*04/22/13 16:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0692	0.0103	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Acenaphthylene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Anthracene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Benzo[a]anthracene	ND		0.0692	0.0155	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Benzo[a]pyrene	ND		0.0692	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Benzo[b]fluoranthene	ND		0.0692	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Benzo[g,h,i]perylene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Benzo[k]fluoranthene	ND		0.0692	0.0145	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
1-Methylnaphthalene	ND		0.0692	0.0145	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Pyrene	ND		0.0692	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Phenanthrene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Chrysene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Dibenz(a,h)anthracene	ND		0.0692	0.00723	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Fluoranthene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Fluorene	ND		0.0692	0.0124	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Indeno[1,2,3-cd]pyrene	ND		0.0692	0.0103	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
Naphthalene	ND		0.0692	0.00929	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1
2-Methylnaphthalene	ND		0.0692	0.0165	mg/Kg	☼	04/18/13 12:55	04/18/13 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 120*	*04/18/13 12:55*	*04/18/13 22:30*	*1*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*04/18/13 12:55*	*04/18/13 22:30*	*1*
Nitrobenzene-d5 (Surr)	*65*		*27 - 120*	*04/18/13 12:55*	*04/18/13 22:30*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			04/18/13 11:20	1

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 434 Elderberry
Date Collected: 04/11/13 11:45
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-8
Matrix: Solid
Percent Solids: 81.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00242	0.000811	mg/Kg	☼	04/17/13 20:15	04/19/13 19:37	1
Ethylbenzene	ND		0.00242	0.000811	mg/Kg	☼	04/17/13 20:15	04/19/13 19:37	1
Naphthalene	ND		0.00605	0.00206	mg/Kg	☼	04/17/13 20:15	04/19/13 19:37	1
Toluene	ND		0.00242	0.000896	mg/Kg	☼	04/17/13 20:15	04/19/13 19:37	1
Xylenes, Total	ND		0.00605	0.000811	mg/Kg	☼	04/17/13 20:15	04/19/13 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*04/17/13 20:15*	*04/19/13 19:37*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*04/17/13 20:15*	*04/19/13 19:37*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*04/17/13 20:15*	*04/19/13 19:37*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*	*04/17/13 20:15*	*04/19/13 19:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0824	0.0123	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Acenaphthylene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Anthracene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Benzo[a]anthracene	ND		0.0824	0.0185	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Benzo[a]pyrene	ND		0.0824	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Benzo[b]fluoranthene	ND		0.0824	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Benzo[g,h,i]perylene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Benzo[k]fluoranthene	ND		0.0824	0.0172	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
1-Methylnaphthalene	ND		0.0824	0.0172	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Pyrene	ND		0.0824	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Phenanthrene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Chrysene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Dibenz(a,h)anthracene	ND		0.0824	0.00861	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Fluoranthene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Fluorene	ND		0.0824	0.0148	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Indeno[1,2,3-cd]pyrene	ND		0.0824	0.0123	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
Naphthalene	ND		0.0824	0.0111	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1
2-Methylnaphthalene	ND		0.0824	0.0197	mg/Kg	☼	04/18/13 12:55	04/18/13 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*	*04/18/13 12:55*	*04/18/13 22:52*	*1*
Terphenyl-d14 (Surr)	*99*		*13 - 120*	*04/18/13 12:55*	*04/18/13 22:52*	*1*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*	*04/18/13 12:55*	*04/18/13 22:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			04/18/13 11:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-24512-C-6-B MS
Matrix: Solid
Analysis Batch: 73618

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73519

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00110	J	0.0539	0.03448		mg/Kg	☼	62	31 - 143
Ethylbenzene	ND		0.0539	0.01888		mg/Kg	☼	35	23 - 161
Naphthalene	ND		0.0539	0.005860		mg/Kg	☼	11	10 - 176
Toluene	0.000864	J	0.0539	0.02707		mg/Kg	☼	49	30 - 155
Xylenes, Total	0.000843	J	0.162	0.05274		mg/Kg	☼	32	25 - 162

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*198*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: 490-24512-C-6-C MSD
Matrix: Solid
Analysis Batch: 73618

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73519

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00110	J	0.0518	0.04027		mg/Kg	☼	76	31 - 143	15	50
Ethylbenzene	ND		0.0518	0.02704		mg/Kg	☼	52	23 - 161	36	50
Naphthalene	ND		0.0518	0.009543		mg/Kg	☼	18	10 - 176	48	50
Toluene	0.000864	J	0.0518	0.03447		mg/Kg	☼	65	30 - 155	24	50
Xylenes, Total	0.000843	J	0.155	0.07682		mg/Kg	☼	49	25 - 162	37	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*132*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 490-73618/7
Matrix: Solid
Analysis Batch: 73618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/19/13 12:45	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/19/13 12:45	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/19/13 12:45	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/19/13 12:45	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/19/13 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*04/19/13 12:45*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*04/19/13 12:45*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*04/19/13 12:45*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*04/19/13 12:45*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-73618/3
Matrix: Solid
Analysis Batch: 73618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05508		mg/Kg		110	75 - 127
Ethylbenzene	0.0500	0.05505		mg/Kg		110	80 - 134
Naphthalene	0.0500	0.06555		mg/Kg		131	69 - 150
Toluene	0.0500	0.05675		mg/Kg		113	80 - 132
Xylenes, Total	0.150	0.1661		mg/Kg		111	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 490-73618/4
Matrix: Solid
Analysis Batch: 73618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05389		mg/Kg		108	75 - 127	2	50
Ethylbenzene	0.0500	0.05412		mg/Kg		108	80 - 134	2	50
Naphthalene	0.0500	0.06231		mg/Kg		125	69 - 150	5	50
Toluene	0.0500	0.05611		mg/Kg		112	80 - 132	1	50
Xylenes, Total	0.150	0.1635		mg/Kg		109	80 - 137	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 490-74074/6
Matrix: Solid
Analysis Batch: 74074

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			04/22/13 14:05	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			04/22/13 14:05	1
Naphthalene	ND		0.250	0.0850	mg/Kg			04/22/13 14:05	1
Toluene	ND		0.100	0.0370	mg/Kg			04/22/13 14:05	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			04/22/13 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*04/22/13 14:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*04/22/13 14:05*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*04/22/13 14:05*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*04/22/13 14:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-74074/7
Matrix: Solid
Analysis Batch: 74074

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/22/13 14:32	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/22/13 14:32	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/22/13 14:32	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/22/13 14:32	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/22/13 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*04/22/13 14:32*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*04/22/13 14:32*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*04/22/13 14:32*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*04/22/13 14:32*	*1*

Lab Sample ID: LCS 490-74074/3
Matrix: Solid
Analysis Batch: 74074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05114		mg/Kg		102	75 - 127
Ethylbenzene	0.0500	0.05100		mg/Kg		102	80 - 134
Naphthalene	0.0500	0.05759		mg/Kg		115	69 - 150
Toluene	0.0500	0.05120		mg/Kg		102	80 - 132
Xylenes, Total	0.150	0.1566		mg/Kg		104	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 490-74074/4
Matrix: Solid
Analysis Batch: 74074

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05255		mg/Kg		105	75 - 127	3	50
Ethylbenzene	0.0500	0.05238		mg/Kg		105	80 - 134	3	50
Naphthalene	0.0500	0.05937		mg/Kg		119	69 - 150	3	50
Toluene	0.0500	0.05273		mg/Kg		105	80 - 132	3	50
Xylenes, Total	0.150	0.1601		mg/Kg		107	80 - 137	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-73447/1-A
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Anthracene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Pyrene	ND		0.0670	0.0120	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Chrysene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Fluorene	ND		0.0670	0.0120	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		04/18/13 12:55	04/18/13 16:35	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		04/18/13 12:55	04/18/13 16:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*04/18/13 12:55*	*04/18/13 16:35*	*1*
Terphenyl-d14 (Surr)	*87*		*13 - 120*	*04/18/13 12:55*	*04/18/13 16:35*	*1*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*	*04/18/13 12:55*	*04/18/13 16:35*	*1*

Lab Sample ID: LCS 490-73447/2-A
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.263		mg/Kg		76	38 - 120
Anthracene	1.67	1.377		mg/Kg		83	46 - 124
Benzo[a]anthracene	1.67	1.317		mg/Kg		79	45 - 120
Benzo[a]pyrene	1.67	1.318		mg/Kg		79	45 - 120
Benzo[b]fluoranthene	1.67	1.301		mg/Kg		78	42 - 120
Benzo[g,h,i]perylene	1.67	1.313		mg/Kg		79	38 - 120
Benzo[k]fluoranthene	1.67	1.372		mg/Kg		82	42 - 120
1-Methylnaphthalene	1.67	1.330		mg/Kg		80	32 - 120
Pyrene	1.67	1.361		mg/Kg		82	43 - 120
Phenanthrene	1.67	1.389		mg/Kg		83	45 - 120
Chrysene	1.67	1.374		mg/Kg		82	43 - 120
Dibenz(a,h)anthracene	1.67	1.222		mg/Kg		73	32 - 128
Fluoranthene	1.67	1.346		mg/Kg		81	46 - 120
Fluorene	1.67	1.267		mg/Kg		76	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.281		mg/Kg		77	41 - 121
Naphthalene	1.67	1.218		mg/Kg		73	32 - 120
2-Methylnaphthalene	1.67	1.402		mg/Kg		84	28 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-73447/2-A
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73447

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	66		29 - 120
Terphenyl-d14 (Surr)	84		13 - 120
Nitrobenzene-d5 (Surr)	67		27 - 120

Lab Sample ID: 490-24039-A-1-B MS
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73447

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		1.85	1.302		mg/Kg	☼	70	25 - 120
Anthracene	0.0350	J	1.85	1.433		mg/Kg	☼	75	28 - 125
Benzo[a]anthracene	0.125		1.85	1.436		mg/Kg	☼	71	23 - 120
Benzo[a]pyrene	0.129		1.85	1.412		mg/Kg	☼	69	15 - 128
Benzo[b]fluoranthene	0.161		1.85	1.486		mg/Kg	☼	72	12 - 133
Benzo[g,h,i]perylene	0.0772		1.85	1.349		mg/Kg	☼	69	22 - 120
Benzo[k]fluoranthene	0.0753		1.85	1.454		mg/Kg	☼	74	28 - 120
1-Methylnaphthalene	ND		1.85	1.299		mg/Kg	☼	70	10 - 120
Pyrene	0.230		1.85	1.667		mg/Kg	☼	78	20 - 123
Phenanthrene	0.125		1.85	1.493		mg/Kg	☼	74	21 - 122
Chrysene	0.132		1.85	1.478		mg/Kg	☼	73	20 - 120
Dibenz(a,h)anthracene	ND		1.85	1.258		mg/Kg	☼	68	12 - 128
Fluoranthene	0.232		1.85	1.426		mg/Kg	☼	64	10 - 143
Fluorene	ND		1.85	1.321		mg/Kg	☼	71	20 - 120
Indeno[1,2,3-cd]pyrene	0.0666	J	1.85	1.285		mg/Kg	☼	66	22 - 121
Naphthalene	ND		1.85	1.116		mg/Kg	☼	60	10 - 120
2-Methylnaphthalene	ND		1.85	1.331		mg/Kg	☼	72	13 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	56		29 - 120
Terphenyl-d14 (Surr)	87		13 - 120
Nitrobenzene-d5 (Surr)	52		27 - 120

Lab Sample ID: 490-24039-A-1-C MSD
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73447

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		1.83	1.384		mg/Kg	☼	76	25 - 120	6	50
Anthracene	0.0350	J	1.83	1.352		mg/Kg	☼	72	28 - 125	6	49
Benzo[a]anthracene	0.125		1.83	1.404		mg/Kg	☼	70	23 - 120	2	50
Benzo[a]pyrene	0.129		1.83	1.336		mg/Kg	☼	66	15 - 128	5	50
Benzo[b]fluoranthene	0.161		1.83	1.479		mg/Kg	☼	72	12 - 133	0	50
Benzo[g,h,i]perylene	0.0772		1.83	1.276		mg/Kg	☼	65	22 - 120	6	50
Benzo[k]fluoranthene	0.0753		1.83	1.363		mg/Kg	☼	70	28 - 120	6	45
1-Methylnaphthalene	ND		1.83	1.393		mg/Kg	☼	76	10 - 120	7	50
Pyrene	0.230		1.83	1.600		mg/Kg	☼	75	20 - 123	4	50
Phenanthrene	0.125		1.83	1.443		mg/Kg	☼	72	21 - 122	3	50
Chrysene	0.132		1.83	1.390		mg/Kg	☼	69	20 - 120	6	49

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-24039-A-1-C MSD
Matrix: Solid
Analysis Batch: 73484

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73447

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	ND		1.83	1.233		mg/Kg	¤	67	12 - 128	2	50
Fluoranthene	0.232		1.83	1.377		mg/Kg	¤	62	10 - 143	4	50
Fluorene	ND		1.83	1.315		mg/Kg	¤	72	20 - 120	0	50
Indeno[1,2,3-cd]pyrene	0.0666	J	1.83	1.218		mg/Kg	¤	63	22 - 121	5	50
Naphthalene	ND		1.83	1.253		mg/Kg	¤	68	10 - 120	12	50
2-Methylnaphthalene	ND		1.83	1.374		mg/Kg	¤	75	13 - 120	3	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*
Terphenyl-d14 (Surr)	*79*		*13 - 120*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-24492-A-21 DU
Matrix: Solid
Analysis Batch: 73396

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.06	20

GC/MS VOA

Prep Batch: 73253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24495-1	1433 Dove	Total/NA	Solid	5035	
490-24495-2	1435-2 Dove	Total/NA	Solid	5035	
490-24495-6	1418 Albatross	Total/NA	Solid	5035	

Prep Batch: 73254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24495-1	1433 Dove	Total/NA	Solid	5035	
490-24495-2	1435-2 Dove	Total/NA	Solid	5035	
490-24495-3	590 Aster	Total/NA	Solid	5035	
490-24495-4	642 Dahlia-2	Total/NA	Solid	5035	
490-24495-5	1422 Albatross	Total/NA	Solid	5035	
490-24495-6	1418 Albatross	Total/NA	Solid	5035	
490-24495-7	591 Aster	Total/NA	Solid	5035	
490-24495-8	434 Elderberry	Total/NA	Solid	5035	

Prep Batch: 73519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24512-C-6-B MS	Matrix Spike	Total/NA	Solid	5035	
490-24512-C-6-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 73618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24495-1	1433 Dove	Total/NA	Solid	8260B	73254
490-24495-2	1435-2 Dove	Total/NA	Solid	8260B	73254
490-24495-4	642 Dahlia-2	Total/NA	Solid	8260B	73254
490-24495-5	1422 Albatross	Total/NA	Solid	8260B	73254
490-24495-6	1418 Albatross	Total/NA	Solid	8260B	73254
490-24495-8	434 Elderberry	Total/NA	Solid	8260B	73254
490-24512-C-6-B MS	Matrix Spike	Total/NA	Solid	8260B	73519
490-24512-C-6-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	73519
LCS 490-73618/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-73618/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-73618/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 74074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24495-1	1433 Dove	Total/NA	Solid	8260B	73253
490-24495-2	1435-2 Dove	Total/NA	Solid	8260B	73253
490-24495-2	1435-2 Dove	Total/NA	Solid	8260B	73253
490-24495-3	590 Aster	Total/NA	Solid	8260B	73254
490-24495-6	1418 Albatross	Total/NA	Solid	8260B	73253
490-24495-7	591 Aster	Total/NA	Solid	8260B	73254
LCS 490-74074/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-74074/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-74074/6	Method Blank	Total/NA	Solid	8260B	
MB 490-74074/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 73447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24039-A-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-24039-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-24495-1	1433 Dove	Total/NA	Solid	3550C	
490-24495-2	1435-2 Dove	Total/NA	Solid	3550C	
490-24495-3	590 Aster	Total/NA	Solid	3550C	
490-24495-4	642 Dahlia-2	Total/NA	Solid	3550C	
490-24495-5	1422 Albatross	Total/NA	Solid	3550C	
490-24495-6	1418 Albatross	Total/NA	Solid	3550C	
490-24495-7	591 Aster	Total/NA	Solid	3550C	
490-24495-8	434 Elderberry	Total/NA	Solid	3550C	
LCS 490-73447/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-73447/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 73484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24039-A-1-B MS	Matrix Spike	Total/NA	Solid	8270D	73447
490-24039-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	73447
490-24495-1	1433 Dove	Total/NA	Solid	8270D	73447
490-24495-2	1435-2 Dove	Total/NA	Solid	8270D	73447
490-24495-3	590 Aster	Total/NA	Solid	8270D	73447
490-24495-4	642 Dahlia-2	Total/NA	Solid	8270D	73447
490-24495-5	1422 Albatross	Total/NA	Solid	8270D	73447
490-24495-6	1418 Albatross	Total/NA	Solid	8270D	73447
490-24495-7	591 Aster	Total/NA	Solid	8270D	73447
490-24495-8	434 Elderberry	Total/NA	Solid	8270D	73447
LCS 490-73447/2-A	Lab Control Sample	Total/NA	Solid	8270D	73447
MB 490-73447/1-A	Method Blank	Total/NA	Solid	8270D	73447

Analysis Batch: 73722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24495-1	1433 Dove	Total/NA	Solid	8270D	73447
490-24495-2	1435-2 Dove	Total/NA	Solid	8270D	73447
490-24495-6	1418 Albatross	Total/NA	Solid	8270D	73447

General Chemistry

Analysis Batch: 73396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24492-A-21 DU	Duplicate	Total/NA	Solid	Moisture	
490-24495-1	1433 Dove	Total/NA	Solid	Moisture	
490-24495-2	1435-2 Dove	Total/NA	Solid	Moisture	
490-24495-3	590 Aster	Total/NA	Solid	Moisture	
490-24495-4	642 Dahlia-2	Total/NA	Solid	Moisture	
490-24495-5	1422 Albatross	Total/NA	Solid	Moisture	
490-24495-6	1418 Albatross	Total/NA	Solid	Moisture	
490-24495-7	591 Aster	Total/NA	Solid	Moisture	
490-24495-8	434 Elderberry	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 1433 Dove

Lab Sample ID: 490-24495-1

Date Collected: 04/08/13 15:30
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 16:28	MH	TAL NSH
Total/NA	Prep	5035			73253	04/17/13 20:10	ML	TAL NSH
Total/NA	Analysis	8260B		2	74074	04/22/13 23:44	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 20:17	KP	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		4	73722	04/19/13 18:06	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Client Sample ID: 1435-2 Dove

Lab Sample ID: 490-24495-2

Date Collected: 04/09/13 15:30
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 16:55	MH	TAL NSH
Total/NA	Prep	5035			73253	04/17/13 20:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	74074	04/22/13 17:25	MH	TAL NSH
Total/NA	Prep	5035			73253	04/17/13 20:10	ML	TAL NSH
Total/NA	Analysis	8260B		20	74074	04/22/13 17:52	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 20:39	KP	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		2	73722	04/19/13 18:28	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Client Sample ID: 590 Aster

Lab Sample ID: 490-24495-3

Date Collected: 04/10/13 14:15
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	74074	04/22/13 16:04	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 21:02	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Lab Chronicle

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 642 Dahlia-2

Lab Sample ID: 490-24495-4

Date Collected: 04/11/13 14:15
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 17:49	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 21:24	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Client Sample ID: 1422 Albatross

Lab Sample ID: 490-24495-5

Date Collected: 04/08/13 13:45
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 18:16	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 21:46	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Client Sample ID: 1418 Albatross

Lab Sample ID: 490-24495-6

Date Collected: 04/09/13 15:30
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 18:43	MH	TAL NSH
Total/NA	Prep	5035			73253	04/17/13 20:10	ML	TAL NSH
Total/NA	Analysis	8260B		1	74074	04/22/13 18:19	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 22:08	KP	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		2	73722	04/19/13 18:50	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Client Sample ID: 591 Aster

Lab Sample ID: 490-24495-7

Date Collected: 04/10/13 14:45
Matrix: Solid
Date Received: 04/17/13 08:30
Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	74074	04/22/13 16:31	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 22:30	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Lab Chronicle

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Client Sample ID: 434 Elderberry

Date Collected: 04/11/13 11:45
Date Received: 04/17/13 08:30

Lab Sample ID: 490-24495-8

Matrix: Solid
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73254	04/17/13 20:15	ML	TAL NSH
Total/NA	Analysis	8260B		1	73618	04/19/13 19:37	MH	TAL NSH
Total/NA	Prep	3550C			73447	04/18/13 12:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	73484	04/18/13 22:52	KP	TAL NSH
Total/NA	Analysis	Moisture		1	73396	04/18/13 11:20	RS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Environmental Enterprise Group
Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-24495-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13 *
Arkansas DEQ	State Program	6	88-0737	04-25-13 *
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oregon	NELAP	10	TN200001	04-30-13 *
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	05-31-14 *
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Charleston


490-24495 Chain of Custody

Cooler Received/Opened On 4/17/2013 @ 0830

1. Tracking # 9641 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 3.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front + Back

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

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

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

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

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA Soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

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

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

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

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

Page 8 of 30

4/30/2013

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

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Toll Free: 800-765-0980
Fax: 615-726-3404

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

Compliance Monitoring? Yes ____ No ____

Enforcement Action? Yes ____ No ____

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

Site State: SC

Project Manager: Tom McElwee email: mcelwee@eeginc.net

PO#: 1035

Telephone Number: 843.412.2097 **Fax No.:** 843-879-0401

TA Quote #:

Sampler Name: (Print) Chris Tumstall

Project ID: Laurel Bay Housing Project

Sampler Signature:

Project #:

Loc: 490

24495

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label) Sodium Bisulfate	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify) Methanol	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: BTEX + Napth - 8260	PAH - 8270D	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
1	1433 DOVE	4/8/13	1530	5	X					2				2	1					X		X	X				
2	1435 DOVE	4/9/13	1530	5	X					2				2	1					X		X	X				
3	590 ASTER	4/10/13	1415	5	X					2				2	1					X		X	X				
4	642 DAHLIA - 2	4/11/13	1415	5	X					2				2	1					X		X	X				

Special Instructions:

Method of Shipment: FEDEX

Laboratory Comments:

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
	4/16/13	0900	Fedex		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
				4/17/13	0530

pg 2 of 3

4/30/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

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

Compliance Monitoring? Yes ___ No ___
Enforcement Action? Yes ___ No ___

Client Name/Account #: EEG - SBG # 2449
Address: 10179 Highway 78
City/State/Zip: Ladson, SC 29456
Project Manager: Tom McElwee email: mcelwee@eeginc.net
Telephone Number: 843.412.2097 **Fax No.:** 843-879-0401
Sampler Name: (Print) Pratt Shaw
Sampler Signature: [signature]

Site State: SC
PO#: 1035
TA Quote #:
Project ID: Laurel Bay Housing Project
Project #:

Loc: 490
24495

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO_3 (Red Label)	~~HCl (Blue Label)~~ Sodium Bisulfate	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass (Yellow Label)	None (Black Label)	Other (Specify) Methanol	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 8260	PAH - 8270D	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
5	1422 Albatross	4/8/13	1345	5	X					2				2	1					X		X	X				
6	1418 Albatross	4/9/13	1530	5	X					2				2	1					X		X	X				
7	591 Aster	4/10/13	1445	5	X					2				2	1					X		X	X				
8	434 Elderberry	4/11/13	1145	5	X					2				2	1					X		X	X				

Preservative / Matrix / Analyze For:

Special Instructions:

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/16/13	0900	Fedex		
Relinquished by:	Date	Time	Received by TestAmerica: [signature] TAN	4/17/13	0830

3.2

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-24495-1

Login Number: 24495
List Number: 1
Creator: Buckingham, Paul

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT A

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of 1	

3. Generator's Mailing Address:
MCAS BEAUFORT
LAUREL BAY HOUSING
BEAUFORT, SC 29904

Generator's Site Address (If different than mailing):

A. Manifest Number: WMNA 01519145

B. State Generator's ID

4. Generator's Phone 843-879-0411

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID / D. Transporter's Phone
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID / F. Transporter's Phone
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY DRIVE RIDGELAND, SC 29936	10. US EPA ID Number	G. State Facility ID H. State Facility Phone 843-987-4643

GENERATOR

11. Description of Waste Materials	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC	1	204	8.29	TON	705980
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

J. Additional Descriptions for Materials Listed Above

K. Disposal Location

Cell | Level
Grid

15. Special Handling Instructions and Additional Information
USTs from: 1) 755 Althea 2) 925 Albacore 3) 741 Bluebell 4) 1422 Albatross 5) 1433 Dove 6) 1418 Albatross

Purchase Order # EMERGENCY CONTACT / PHONE NO.:

16. GENERATOR'S CERTIFICATE:
I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name	Signature "On behalf of"	Month	Day	Year
W.B. Dukes, Jr.	[signature]	4	16	13

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
PRATT SHAW	[signature]	4	16	13

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
JAMES BALdwiN	James Baldwin	4	16	13

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name	Signature	Month	Day	Year
Tom Canfield	Tom Canfield	4	16	13

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY Blue- GENERATOR #2 COPY Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY Gold- TRANSPORTER #1 COPY

Appendix C
Laboratory Analytical Report - Groundwater

CDM - AECOM
Multimedia Joint Venture

Volatile Organic Compounds by GC/MS

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QB04032-004**
Description: **BEALB1433TW01WG20150202**
Matrix: **Aqueous**
Date Sampled: **02/02/2015 1740**
Date Received: **02/04/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/06/2015 1552	ALL		67113

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**0.85**	**J**	**5.0**	**0.51**	**0.17**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**11**		**5.0**	**0.96**	**0.32**	**ug/L**	**1**
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.16	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**4.2**	**J**	**5.0**	**0.57**	**0.19**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	75-120
1,2-Dichloroethane-d4		105	70-120
Toluene-d8		99	85-120
Dibromofluoromethane		102	85-115

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

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: **AECOM - Resolution Consultants**
Laboratory ID: **QB04032-004**
Description: **BEALB1433TW01WG20150202**
Matrix: **Aqueous**
Date Sampled: **02/02/2015 1740**
Date Received: **02/04/2015**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D (SIM)	1	02/09/2015 1251	RBH	02/05/2015 1624	67030

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	**56-55-3**	**8270D (SIM)**	**0.20**		**0.20**	**0.040**	**0.019**	**ug/L**	**1**
Benzo(b)fluoranthene	**205-99-2**	**8270D (SIM)**	**0.20**	**B**	**0.20**	**0.040**	**0.019**	**ug/L**	**1**
Benzo(k)fluoranthene	**207-08-9**	**8270D (SIM)**	**0.077**	**J**	**0.20**	**0.040**	**0.024**	**ug/L**	**1**
Chrysene	**218-01-9**	**8270D (SIM)**	**0.22**		**0.20**	**0.040**	**0.021**	**ug/L**	**1**
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		136	15-139
Fluoranthene-d10		44	23-154

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

Appendix D
Laboratory Analytical Report - Vapor

CDM - AECOM
Multimedia Joint Venture

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **AECOM** ALS Project ID: P1404131
Client Sample ID: **BEALB1433SG01GS20141008** ALS Sample ID: P1404131-014
Client Project ID: **JM30- Laurel Bay Military Housing Area, MCAS Beauf / 60272162.FI.WS**

Test Code: EPA TO-15 Date Collected: 10/8/14
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 10/9/14
Analyst: Simon Cao Date Analyzed: 10/13/14
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC02003

Initial Pressure (psig): -2.19 Final Pressure (psig): 3.56

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	LOQ µg/m³	LOD µg/m³	MDL µg/m³	Data Qualifier
71-43-2	Benzene	**0.35**	0.73	0.64	0.23	**J**
108-88-3	Toluene	**0.34**	0.73	0.61	0.25	**J**
100-41-4	Ethylbenzene	0.63	0.73	0.63	0.23	**U**
179601-23-1	m,p-Xylenes	1.2	1.5	1.2	0.44	**U**
95-47-6	o-Xylene	0.60	0.73	0.60	0.22	**U**
91-20-3	Naphthalene	0.60	0.73	0.60	0.26	**U**

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

Appendix E
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

April 1, 2014

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

RE: IGWA
Laurel Bay Underground Storage Tank Assessment Reports for:
See attached sheet

Dear Mr. Drawdy,

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

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

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

If you have any questions, please contact me at kriegkm@gmail.com or 803-898-0255.

Sincerely,

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)
Craig Ehde (via email)

Attachment to: Krieg to Drawdy
Subject: IGWA
Dated 4/1/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (25 addresses/26 tanks)

1187 Bobwhite	1456 Cardinal
1431 Dove	1457 Cardinal
1433 Dove	1461 Cardinal
1435 Dove Tank #1	1465 Cardinal
1435 Dove Tank #2	1467 Cardinal
1437 Dove	1469 Cardinal
1439 Dove	1470 Cardinal
1441 Dove	1471 Cardinal
1447 Dove	1473 Cardinal
1449 Dove	1477 Cardinal
1451 Dove	1478 Cardinal
1452 Cardinal	1479 Cardinal
1454 Cardinal	1485 Cardinal

D H E C
PROMOTE PROTECT PROSPER
W. Marshall Taylor Jr., Acting Director
Promoting and protecting the health of the public and the environment

May 5, 2015

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

RE: Correction - Recommendation Concurrence
Draft Final Initial Groundwater Investigation Report
Dated April 2015

Dear Mr. Drawdy,

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

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 3 stated addresses. For the remaining 23 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time. *Note the correction to the attachment, properly referencing 1431 Dove and 1435 Dove Tank 1 and Tank 2 in the Permanent Monitoring Well Investigation recommendation section.*

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

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

Sincerely,

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Attachment: Specific Property Recommendations

Cc: Russell Berry (via email)
Craig Ehde (via email)
Bryan Beck (via email)

D H E C
PROMOTE PROTECT PROSPER
W. Marshall Taylor Jr., Acting Director
Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report - April 2015
Specific Property Recommendations
Dated 5/5/2015

Draft Final Initial Groundwater Investigation Report for: (26 addresses/28 tanks)

Permanent Monitoring Well Investigation recommendation (3 addresses/4 tanks):	
1431 Dove	1435 Dove Tank 2
1435 Dove Tank 1	1452 Cardinal
No Further Action recommendation (23 addresses/24 tanks):	
1187 Bobwhite	1463 Cardinal
1433 Dove	1465 Cardinal
1437 Dove	1467 Cardinal
1439 Dove	1469 Cardinal
1441 Dove	1470 Cardinal
1447 Dove	1473 Cardinal
1449 Dove	1471 Cardinal
1451 Dove	1477 Cardinal
1454 Cardinal	1478 Cardinal
1456 Cardinal	1479 Cardinal Tank 1
1457 Cardinal	1479 Cardinal Tank 2
1461 Cardinal	1485 Cardinal

D H E C
PROMOTE PROTECT PROSPER

W. Marshall Taylor Jr., Acting Director
Promoting and protecting the health of the public and the environment

Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

March 10, 2015

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

RE: Approval
Draft Final Technical Memorandum-Soil Gas Sampling Results
October 2014
Laurel Bay Military Housing Area

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced soil gas sampling results for multiple former heating oil tank sites on February 2, 2015. During tank removal, contaminated soil had been observed at the former tank sites selected for this study. The purpose of this study was to evaluate whether the constituents observed in soil have potential for exposure and risk to residents through impacted vapor intrusion pathways. Sampling was performed at fourteen (14) former heating oil tank sites with a range of VOCs present in the soil at the time of tank removal. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the soil gas sampling results. The Department has generated no comments on this report. Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary. If you have any questions, please contact me at petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus
Department of Defense Corrective Action Section

Cc: Russell Berry, EQC Region 8
Shawn Dolan, Resolution Consultants