SUMMARY REPORT
569 ALBATROSS DRIVE (FORMERLY 1424 ALBATROSS DRIVE)

LAUREL BAY MILITARY HOUSING AREA

MARINE CORPS AIR STATION BEAUFORT

BEAUFORT, SC

Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic 9324 Virginia Avenue Norfolk, Virginia 23511-3095 SUMMARY REPORT
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Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

**JUNE 2021** 



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# List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon

QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank

VISL vapor intrusion screening level



#### 1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 569 Albatross Drive (Formerly 1424 Albatross Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

### 1.1 Background Information

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





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

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

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

## 1.2 UST Removal and Assessment Process

During the UST removal process, a soil sample was collected from beneath the UST excavations (approximately 4 to 6 feet [ft] below ground surface [bgs]) and analyzed for a predetermined list of constituents of potential concern (COPCs) associated with the petroleum compounds found in home heating oil. These COPCs, derived from the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division, Revision 3.1* (SCDHEC, 2016) and the *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service,* (SCDHEC, 2018), are as follows:

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

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management* 



*Division* (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

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

# 2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 569 Albatross Drive (Formerly 1424 Albatross Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1424 Albatross Drive* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

# 2.1 UST Removal and Soil Sampling

On April 17, 2013, a single 280 gallon heating oil UST was removed from the front yard adjacent to the porch area at 569 Albatross Drive (Formerly 1424 Albatross Drive). 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 4'2" bgs and a single soil sample was collected from that depth. The



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

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

# 2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 569 Albatross Drive (Formerly 1424 Albatross Drive) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

#### 3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 569 Albatross Drive (Formerly 1424 Albatross Drive). This NFA determination was obtained in a letter dated November 18, 2014. SCDHEC's NFA letter is provided in Appendix C.

#### 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1424 Albatross Drive, Laurel Bay Military Housing Area, October 2013.

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.

# **Table**



# Table 1

# Laboratory Analytical Results - Soil 569 Albatross Drive (Formerly 1424 Albatross Drive)

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

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 04/17/13
Volatile Organic Compounds Analyzed	by EPA Method 8260B (mg/kg)	
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
Semivolatile Organic Compounds Anal	yzed by EPA Method 8270D (mg/kg)	
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

#### Notes:

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

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

# Appendix A Multi-Media Selection Process for LBMH





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

# Appendix B UST Assessment Report



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

Date Received
State Use Only

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



OCT 2 3 20143

SE DHEC - Bureau of Land & Waste Management I.

OWNERSHIP OF UST (S)

	manding Officer Attn: N	REAO (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 Milita	y Housing Area, Marine Corps Air Station, Beaufort,	SC
Facility Name or Company	Site Identifier	
1424 Albatross Dr Street Address or State Roa	ive, Laurel Bay Military Housing Area (as applicable)	_
Beaufort,	Beaufort	
City	County	

Attachment 2

# III. INSURANCE INFORMATION

Insurance	Statement
The petroleum release reported to DHEC onqualify to receive state monies to pay for appropriate sit allowed in the State Clean-up fund, written confirmation insurance policy is required. This section must be com	n of the existence or non-existence of an environmental
Is there now, or has there ever been an insurance UST release? YES NO (check one)	e policy or other financial mechanism that covers this
If you answered YES to the above questi	on, 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	e a copy of the policy with this report.
I DO / DO NOT wish to participate in the SU  V. CERTIFICATION	(To be signed by the UST owner)
I certify that I have personally examined and am fa attached documents; and that based on my inquiry information, I believe that the submitted information	miliar with the information submitted in this and all y of those individuals responsible for obtaining this is true, accurate, and complete.
Name (Type or print.)	
Signature	<del>-</del>
To be completed by Notary Public:	
Sworn before me this day of	
(Name)	_
Notary Public for the state of	South Carolina

1424 Albatross
Heating oil
280 gal
Late 1950s
Steel
Mid 80s
4'2"
No
No
Removed
4/17/2013
Yes
Yes
the ground (attach disposal manifests) from the ground and disposed at a
achment "A".
dges, or wastewaters removed from the USTs (attace

# VII. PIPING INFORMATION

Construction Material(ex. Steel, FRP)  Distance from UST to Dispenser		Albatross
Construction Material(ex. Steel, FRP)  Distance from UST to Dispenser		Steel
Distance from UST to Dispenser	2	& Copper
Number of Dispensers	Construction Material(ex. Steel, FRP)	
Type of System Pressure or Suction  Was Piping Removed from the Ground? Y/N  Visible Corrosion or Pitting Y/N  No  Late 1950s  If any corrosion, pitting, or holes were observed, describe the location and extent for each pictory corrosion and pitting were found on the surface of the steel pipe. 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	Distance from UST to Dispenser	N/A
Was Piping Removed from the Ground? Y/N  Visible Corrosion or Pitting Y/N	Number of Dispensers	N/A
Visible Corrosion or Pitting Y/N	Type of System Pressure or Suction	Suction
Visible Holes Y/N	Was Piping Removed from the Ground? Y/N	No
Age	Visible Corrosion or Pitting Y/N	Yes
If any corrosion, pitting, or holes were observed, describe the location and extent for each pi  Corrosion and pitting were found on the surface of the steel pipe. 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	Visible Holes Y/N	No
Corrosion and pitting were found on the surface of the steel pipe. 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	Age	Late 1950s
VIII. BRIEF SITE DESCRIPTION AND HISTORY The USTs at the residences are constructed of single wall stead formerly contained fuel oil for heating. These USTs were	If any corrosion, pitting, or holes were observed,	describe the location and extent for each piping
VIII. BRIEF SITE DESCRIPTION AND HISTORY The USTs at the residences are constructed of single wall stead formerly contained fuel oil for heating. These USTs were	Corrosion and nitting were foun	d on the surface of the steel v
VIII. BRIEF SITE DESCRIPTION AND HISTORY The USTs at the residences are constructed of single wall stee and formerly contained fuel oil for heating. These USTs were		
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and formerly contained fuel oil for heating. These USTs were	그 사람들은 그 사람들은 사람들이 가장 아름다면 가장 하는 것이 되었다. 그런 사람들이 없는 것이 없는 것이 없는 것이 없는 것이다.	TREE - 'NOTE 'TET 다 전하고 하다'() 하게 되면 가게 하지 않는데,
마시트 하늘에 가고 있었다. 이 아래 내는 사람이 되었다. 이 작가는 내내 사람들이 있는 사람들이 가는 사람들이 가는 사람들이 되었다. 그는 그들은 그는 그는 그는 그는 그는 그를 다 그를 다 먹는 것이다.		onstructed of single wall steel
Installed in the late 1950s and last used in the mid 1960s.		for heating These HITE were
	and formerly contained fuel oil	수는 가능하다 맞이 어디에 맞이 그렇게 되었다면 그 이번 독일 이번 회장 때문에 다른
	and formerly contained fuel oil	수는 가능하다 맞이 어디에 깨어 그렇게 되었다면 그리는 작업 이번 회장 때문에 다른
	and formerly contained fuel oil	수는 가능하다 맞이 어디에 깨어 그렇게 되었다면 그리는 작업 이번 회장 때문에 다른
	and formerly contained fuel oil	수는 가능하다 맞이 어디에 깨어 그렇게 되었다면 그리는 작업 이번 회장 때문에 다른
	and formerly contained fuel oil	수는 가능하다 맞이 어디에 깨어 그렇게 되었다면 그리는 작업 이번 회장 때문에 다른
	and formerly contained fuel oil	수는 경영을 가입니다. 그런 그래도 보고 가입을 보고 있는 것은 그리는 것은 것은 것은 것이다.

# 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	
<ul> <li>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</li> <li>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</li> </ul>		х	
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:		х	
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#
1424 Albatros	Excav at fill end	Soil	Sand	4'2"	4/17/13 1545 hrs	P. Shaw	
					10	-	
8			1				
9	1						
10							
11				1			
12							
13							
14							
15							
16							
17							
18							
19							
20							

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

# XI. SAMPLING METHODOLOGY

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

Sampling was performed in accordance with SC DHEC R.61-92 Part 280
and SC DHEC Assessment Guidelines. Sample containers were prepared by th
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.

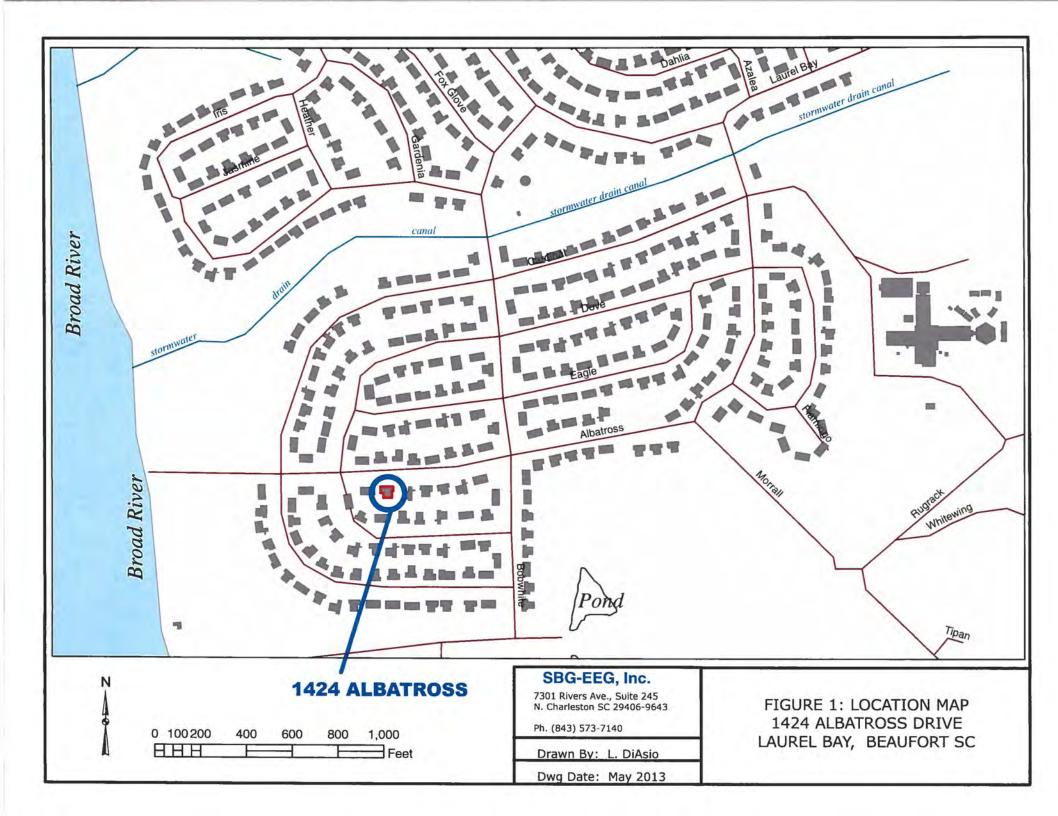
## XII. RECEPTORS

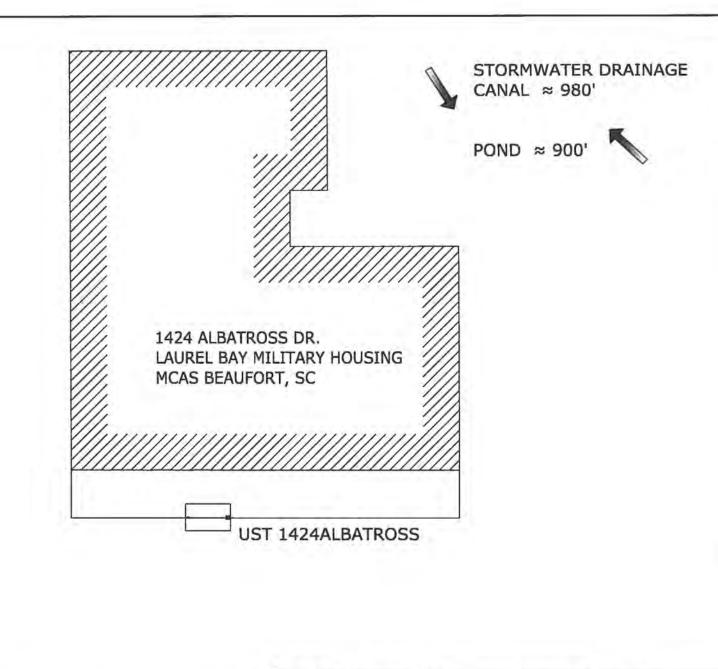
Yes No A. Are there any lakes, ponds, streams, or wetlands located within \*X 1000 feet of the UST system? \*Stormwater canal & pond If yes, indicate type of receptor, distance, and direction on site map. B. Are there any public, private, or irrigation water supply wells within X 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map. C. Are there any underground structures (e.g., basements) X Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map. D. Are there any underground utilities (e.g., telephone, electricity, gas, \*X 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. E. Has contaminated soil been identified at a depth less than 3 feet X 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.

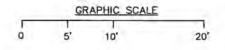
# XIII. SITE MAP

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)







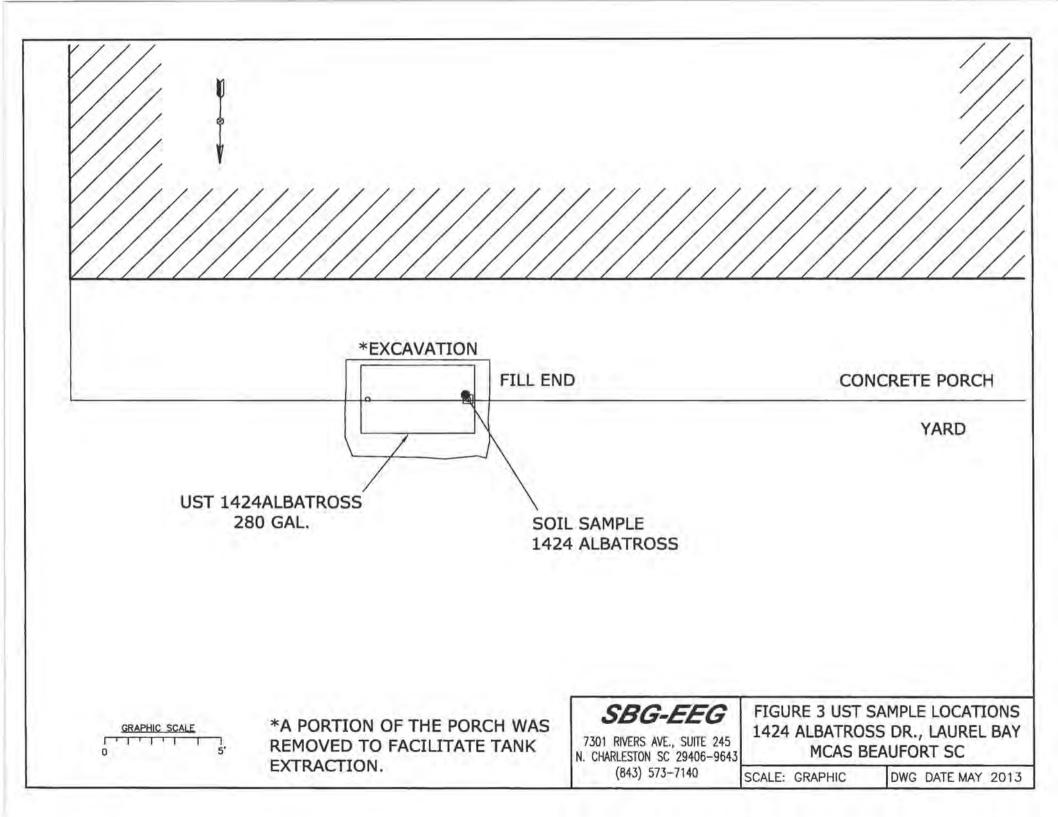
TANK DEPTH BELOW GRADE 1424ALBATROSS = 14"

# SBG-EEG

7301 RIVERS AVE., SUITE 245 N. CHARLESTON SC 29406-9643 (843) 573-7140 FIGURE 2 SITE MAP 1424 ALBATROSS DR., LAUREL BAY MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE MAY 2013





Picture 1: Location of UST 1424Albatross.



Picture 2: UST 1424Albatross 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	1424Albatros	8		
Benzene	ND			
Toluene	ND			
Ethylbenzene	ND			
Xylenes	ND			
Naphthalene	ND			
Benzo (a) anthracene	ND			
Benzo (b) fluoranthene	ND			
Benzo (k) fluoranthene	ND			
Chrysene	ND	J = -1		
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			1	
мтве	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05		- = 1		
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)



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# **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: 490-25044-1 Client Project/Site: EEG Laurel Bay Site

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Haye

Authorized for release by: 4/30/2013 4:38:58 PM

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

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Receipt Checklists	27

# Sample Summary

Client: Environmental Enterprise Group Project/Site: EEG Laurel Bay Site TestAmerica Job ID: 490-25044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-25044-1	1212 Cardinal	Solid	04/15/13 15:15	04/24/13 08:15
490-25044-2	1266 Dove	Solid	04/16/13 15:15	04/24/13 08:15
490-25044-3	1424 Albatross	Solid	04/17/13 15:45	04/24/13 08:15
490-25044-4	1285 Dove	Solid	04/16/13 14:45	04/24/13 08:15
490-25044-5	1245 Dove	Solid	04/17/13 14:15	04/24/13 08:15
490-25044-6	1445 Dove	Solid	04/18/13 13:45	04/24/13 08:15

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## **Case Narrative**

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

TestAmerica Job ID: 490-25044-1

Job ID: 490-25044-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-25044-1

#### Comments

No additional comments.

#### Receip

The samples were received on 4/24/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

#### GC/MS VOA

Method(s) 8260B: The method blank for batch 74897 contained naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): 1212 Cardinal (490-25044-1), 1245 Dove (490-25044-5). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 1212 Cardinal (490-25044-1), 1245 Dove (490-25044-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B; Surrogate recovery for the following sample(s) was outside control limits: 1245 Dove (490-25044-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

-4

# Definitions/Glossary

Client: Environmental Enterprise Group Project/Site: EEG Laurel Bay Site TestAmerica Job ID: 490-25044-1

#### Qualifiers

### GC/MS 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.

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)

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**General Chemistry** 

Analyte

Percent Solids

Method: 8260B - Volatile Orga			Pi	MEN	Halk	-	Donner		DII For
Analyte	Result	Qualifier	0.00237	0.000794	Unit	D	Prepared 04/24/13 18:04	Analyzed 04/26/13 14:01	Dil Fac
Benzene					mg/Kg	- 10			
Ethylbenzene	ND		0.00237	0.000794	mg/Kg	8	04/24/13 18:04	04/26/13 14:01	1
Naphthalene	ND		0.374	0.127		- 4	04/24/13 17:29	04/26/13 15:02	
Toluene	ND		0.00237	0.000877		- 0	04/24/13 18:04	04/26/13 14:01	1
Xylenes, Total	ND		0.00592	0.000794	mg/Kg		04/24/13 18:04	04/26/13 14:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130				04/24/13 18:04	04/26/13 14:01	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				04/24/13 17:29	04/26/13 15:02	1
4-Bromofluorobenzene (Surr)	127		70 - 130				04/24/13 18:04	04/26/13 14:01	1
4-Bromofluorobenzene (Surr)	94		70 - 130				04/24/13 17:29	04/26/13 15:02	1
Dibromofluoromethane (Surr)	111		70 - 130				04/24/13 18:04	04/26/13 14:01	1
Dibromofluoromethane (Surr)	92		70 - 130				04/24/13 17:29	04/26/13 15:02	1
Toluene-d8 (Surr)	107		70 - 130				04/24/13 18:04	04/26/13 14:01	1
Toluene-d8 (Surr)	99		70 - 130				04/24/13 17:29	04/26/13 15:02	1
Method: 8270D - Semivolatile	Organic Compou	inds (GC/MS	3)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0846	0.0126	mg/Kg	0	04/25/13 08:27	04/25/13 18:19	1
Acenaphthylene	ND		0.0846	0.0114	mg/Kg	17	04/25/13 08:27	04/25/13 18:19	1
Anthracene	ND		0.0846	0.0114	mg/Kg	- 11	04/25/13 08:27	04/25/13 18:19	1
Benzo[a]anthracene	ND		0.0846	0.0189	mg/Kg	п	04/25/13 08:27	04/25/13 18:19	4
Benzo[a]pyrene	ND		0.0846	0.0151	mg/Kg	12	04/25/13 08:27	04/25/13 18:19	4
Benzo[b]fluoranthene	ND		0.0846	0.0151	mg/Kg	19	04/25/13 08:27	04/25/13 18:19	1
Benzo[g,h,i]perylene	ND		0.0846	0.0114	mg/Kg	(0,	04/25/13 08:27	04/25/13 18:19	7
Benzo[k]fluoranthene	ND		0.0846	0.0177	mg/Kg	(0)	04/25/13 08:27	04/25/13 18:19	1
1-Methylnaphthalene	ND		0.0846	0.0177	mg/Kg	(0)	04/25/13 08:27	04/25/13 18:19	1
Pyrene	ND		0.0846	0.0151	mg/Kg	.00	04/25/13 08:27	04/25/13 18:19	1
Phenanthrene	ND		0.0846	0.0114	mg/Kg	(0)	04/25/13 08:27	04/25/13 18:19	1
Chrysene	0.0644	J	0.0846	0.0114	mg/Kg	to	04/25/13 08:27	04/25/13 18:19	1
Dibenz(a,h)anthracene	ND		0.0846	0.00884	mg/Kg	12	04/25/13 08:27	04/25/13 18:19	1
Fluoranthene	ND		0.0846	0.0114	mg/Kg	13	04/25/13 08:27	04/25/13 18:19	4
Fluorene	ND		0.0846	0.0151	mg/Kg	12	04/25/13 08:27	04/25/13 18:19	1
Indeno[1,2,3-cd]pyrene	ND		0.0846	0.0126	mg/Kg	13	04/25/13 08:27	04/25/13 18:19	1
Naphthalene	ND		0.0846	0.0114	mg/Kg	10	04/25/13 08:27	04/25/13 18:19	1
2-Methylnaphthalene	ND		0.0846	0.0202		ū	04/25/13 08:27	04/25/13 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
2-Fluorobiphenyl (Surr)	51		29 - 120				04/25/13 08:27	04/25/13 18:19	1
Terphenyl-d14 (Surr)	71		13 - 120				04/25/13 08:27	04/25/13 18:19	1
Nitrobenzene-d5 (Surr)	54		27 - 120				04/25/13 08:27	04/25/13 18:19	1
Acres of the second									

Analyzed

04/25/13 08:25

Dii Fac

RL

0.10

RL Unit

0.10 %

Prepared

Result Qualifier

79

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

Client Sample ID: 1266 Dove Date Collected: 04/16/13 15:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-2

TestAmerica Job ID: 490-25044-1

Matrix: Solid

Percent Solids: 97.1

Method: 8260B - Volatile Organi	c Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00221	0.000741	mg/Kg	8	04/24/13 18:04	04/25/13 13:56	1
Ethylbenzene	ND		0.00221	0.000741	mg/Kg	1.1	04/24/13 18:04	04/25/13 13:56	1
Naphthalene	ND		0.00553	0.00188	mg/Kg	(6)	04/24/13 18:04	04/25/13 13:56	-1
Toluene	ND		0.00221	0.000819	mg/Kg	.0	04/24/13 18:04	04/25/13 13:56	1
Xylenes, Total	ND		0.00553	0.000741	mg/Kg	0	04/24/13 18:04	04/25/13 13:56	1
Surrogate	%Recovery	Qualifler	Limits				Prepared	Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				04/24/13 18:04	04/25/13 13:56	1
4-Bromofluorobenzene (Surr)	108		70 - 130				04/24/13 18:04	04/25/13 13:56	1
Dibromofluoromethane (Surr)	97		70 - 130				04/24/13 18:04	04/25/13 13:56	1
Toluene-d8 (Surr)	100		70 - 130				04/24/13 18:04	04/25/13 13:56	1
Method: 8270D - Semivolatile Or	ganic Compou	nds (GC/MS	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0679	0.0101	mg/Kg	13	04/25/13 08:27	04/25/13 19:24	1
Acenaphthylene	ND		0.0679	0.00912	mg/Kg	.03	04/25/13 08:27	04/25/13 19:24	1
Anthracene	ND		0.0679	0.00912	mg/Kg	77	04/25/13 08:27	04/25/13 19:24	1
Benzo[a]anthracene	0.381		0.0679	0.0152	mg/Kg	72	04/25/13 08:27	04/25/13 19:24	1
Benzo[a]pyrene	0.717		0.0679	0.0122	mg/Kg	12	04/25/13 08:27	04/25/13 19:24	1
Benzo[b]fluoranthene	1.19		0.0679	0.0122	mg/Kg	TI	04/25/13 08:27	04/25/13 19:24	-1
Benzo[g,h,i]perylene	0.752		0.0679	0.00912	mg/Kg	T	04/25/13 08:27	04/25/13 19:24	1
Benzo[k]fluoranthene	0.415		0.0679	0.0142	mg/Kg	13	04/25/13 08:27	04/25/13 19:24	1
1-Methylnaphthalene	ND		0.0679	0.0142	mg/Kg	- 12	04/25/13 08:27	04/25/13 19:24	1
Pyrene	0,229		0.0679	0.0122	mg/Kg	- 13	04/25/13 08:27	04/25/13 19:24	1
Phenanthrene	ND		0.0679	0.00912	mg/Kg	41	04/25/13 08:27	04/25/13 19:24	1
Chrysene	0.714		0.0679	0.00912	mg/Kg	- 0	04/25/13 08:27	04/25/13 19:24	1
Dibenz(a,h)anthracene	0.0482	J	0.0679	0.00709	mg/Kg	12	04/25/13 08:27	04/25/13 19:24	1
Fluoranthene	0.127		0.0679	0.00912	mg/Kg	(0)	04/25/13 08:27	04/25/13 19:24	1
Fluorene	ND		0.0679	0.0122	mg/Kg	litt.	04/25/13 08:27	04/25/13 19:24	1
Indeno[1,2,3-cd]pyrene	0.490		0.0679	0.0101	mg/Kg	E	04/25/13 08:27	04/25/13 19:24	1
Naphthalene	ND		0.0679	0.00912	mg/Kg	10	04/25/13 08:27	04/25/13 19:24	- 1
2-Methylnaphthalene	ND		0.0679	0.0162	mg/Kg	E	04/25/13 08:27	04/25/13 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
2-Fluorobiphenyl (Surr)	64		29 - 120				04/25/13 08:27	04/25/13 19:24	1
Terphenyl-d14 (Surr)	86		13 - 120				04/25/13 08:27	04/25/13 19:24	1
Nitrobenzene-d5 (Surr)	59		27 - 120				04/25/13 08:27	04/25/13 19:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			04/25/13 08:25	1

# Client Sample ID: 1424 Albatross

Date Collected: 04/17/13 15:45 Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-3

Matrix: Solid
Percent Solids: 83.3

Result   Qualifier   Rt.   MDL   Unit   D   Prepared   Analyzed	8260B - Volatile Organic	THE RESERVE OF THE PERSON OF T		120			- 2	100000	43435	DILE.
Ethylbenzene			Qualifier							Dil Fac
ND										1
Toluene ND 0.00193 0.000715 mg/kg 0.4724/13 18:04 04/25/13 14:27 Xylenes, Total ND 0.00483 0.000648 mg/kg 0.4724/13 18:04 04/25/13 14:27 Xylenes, Total ND 0.00483 0.000648 mg/kg 0.4724/13 18:04 04/25/13 14:27 Xylenes, Total ND 0.00483 0.000648 mg/kg 0.4724/13 18:04 04/25/13 08:27 04/25/13 18:04 04/25/13 0	ene									1
Xylenes, Total   ND   0.00483   0.00648   mg/kg   0 04/24/13 18:04   04/25/13 18:04   04/	ne									1
Surrogate   %Recovery   Qualifier   Limits   Prepared   Analyzed						A 17 A 17				1
1,2-Dichiorosithane-44 (Surr) 103 70 - 130 04/25/13 18:04 04/25/13 18:04 04/25/13 18:04 04/25/13 18:04 04/25/13 18:04 04/25/13 18:07 04/25/13	otal	ND		0.00483	0.000648	mg/Kg		04/24/13 18:04	04/25/13 14:27	1
4-Bromofluorobenzene (Surr) 111 70 - 130 04/24/13 18:04 04/25/13 18:04 04/25/13 14:27 Dibromofluoromethane (Surr) 99 70 - 130 04/24/13 18:04 04/25/13 18:04 04/25/13 14:27 Od/24/13 18:04 04/25/13 14:27 Od/25/13 14:27 Od/25/13 14:27 Od/25/13 14:05 Od/25/13 14:05 Od/25/13 14:05 Od/25/13 18:04 Od/25/13 14:05 Od/25/13 18:04 Od/25/13 08:27		%Recovery	Qualifier	Limits				Prepared		Dil Fac
Dibromofiluoromethane (Surr)   99   70 - 130   04/25/13 18:04   04/25/13 14:27   04/25/13 18:04   04/25/13 14:27   04/25/13 18:04   04/25/13	roethane-d4 (Surr)	103		70 - 130				04/24/13 18:04	04/25/13 14:27	1
Method: 8270D - Semivolatile Organic Compounds (GC/MS)   Analyte   Result   Quelifier   RL   MDL   Unit   D   Prepared   Analyzed   Accapability   Accapab	uorobenzene (Surr)	111		70 - 130				04/24/13 18:04	04/25/13 14:27	1
Method: 8270D - Semivolatile Organic Compounds (GC/MS)         Result Qualifier         RL         MDL Unit         D         Prepared Prepared         Analyzed Analyzed           Acenaphthene         ND         0.0799         0.0119         mg/kg         0.0425/13 08:27         0.425/13 19:46           Acenaphthylene         ND         0.0799         0.0107         mg/kg         0.0425/13 08:27         0.425/13 19:46           Anthracene         ND         0.0799         0.0107         mg/kg         0.0425/13 08:27         0.425/13 19:46           Benzo[a]anthracene         ND         0.0799         0.0107         mg/kg         0.425/13 08:27         0.4725/13 19:46           Benzo[a]pyrene         ND         0.0799         0.0143         mg/kg         0.425/13 08:27         0.4725/13 19:46           Benzo[s]h,ilperylene         ND         0.0799         0.0107         mg/kg         0.425/13 08:27         0.4725/13 19:46           Benzo[s]k,ilperylene         ND         0.0799         0.0107         mg/kg         0.425/13 08:27         0.4725/13 19:46           Benzo[s]kiluoranthene         ND         0.0799         0.0167         mg/kg         0.425/13 08:27         0.4725/13 19:46           Benzo[s]kiluoranthene         ND         0.0799         0.0167<	ioromethane (Surr)	99		70 - 130				04/24/13 18:04	04/25/13 14:27	1
Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Acenaphthene         ND         0.0799         0.0119         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Acenaphthylene         ND         0.0799         0.0107         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]anthracene         ND         0.0799         0.0179         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]pyrene         ND         0.0799         0.0143         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]pyrene         ND         0.0799         0.0143         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]h,liperylene         ND         0.0799         0.0167         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]h,liperylene         ND         0.0799         0.0167         mg/Kg         0         04/25/13 08:27         04/25/13 19:46           Benzo[a]h,liperylene         ND         0.0799         0.0167         mg/Kg         0         04/25/13 08:27         04/25/13 19:46	8 (Surr)	99		70 - 130				04/24/13 18:04	04/25/13 14:27	1
Acenaphthene         ND         0.0799         0.0119         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Acenaphthylene         ND         0.0799         0.0107         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Anthracene         ND         0.0799         0.0107         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[a]pyrene         ND         0.0799         0.0143         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[p]liuoranthene         ND         0.0799         0.0143         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[k]fluoranthene         ND         0.0799         0.0107         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[k]fluoranthene         ND         0.0799         0.0107         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[k]fluoranthene         ND         0.0799         0.0167         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[k]fluoranthene         ND         0.0799         0.0167         mg/Kg         0.4/25/13 08:27         0.4/25/13 19:46           Benzo[k]fluoranthene         ND         0.0799         0.0167         mg/Kg <t< td=""><td>8270D - Semivolatile Or</td><td>ganic Compou</td><td>inds (GC/MS</td><td>5)</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	8270D - Semivolatile Or	ganic Compou	inds (GC/MS	5)						
Acenaphthylene					MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[a]apyrene ND 0.0799 0.0143 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[b]fluoranthene ND 0.0799 0.0143 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[b]fluoranthene ND 0.0799 0.0143 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[b]fluoranthene ND 0.0799 0.0143 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0167 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0167 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0143 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.00834 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 0.4/25/13 08:27 04/25/13 19:46 Phenan	ene	ND		0.0799	0.0119	mg/Kg	ū	04/25/13 08:27	04/25/13 19:46	1
Benzo[a]anthracene	ylene	ND		0.0799	0.0107	mg/Kg	13	04/25/13 08:27	04/25/13 19:46	1
Benzo[a]pyrene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Benzo[b]fluoranthene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 04/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzo[k]fluoranthene ND 0.0799 0.0167 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthrene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthrene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene Denzenthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Denzenthene Denz	e	ND		0.0799	0.0107	mg/Kg	13	04/25/13 08:27	04/25/13 19:46	1
Benzo[b]fluoranthene ND 0.0799 0.0143 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[c]h,i]perylene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0143 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0143 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29-120 04/25/13 08:27 04/25/13 19:46 Terphenyl-d14 (Surr) 82 13 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46	nthracene	ND		0.0799	0.0179	mg/Kg	- 0	04/25/13 08:27	04/25/13 19:46	1
Benzo[s,h,i]perylene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Benzo[k]fluoranthene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0143 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.00834 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46	yrene	ND		0.0799	0.0143	mg/Kg	11	04/25/13 08:27	04/25/13 19:46	1
Benzo[k]filluoranthene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.4/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 0.0129 0.01	uoranthene	ND		0.0799	0.0143	mg/Kg	0.	04/25/13 08:27	04/25/13 19:46	1
1-Methylnaphthalene ND 0.0799 0.0167 mg/kg 04/25/13 08:27 04/25/13 19:46 Pyrene ND 0.0799 0.0143 mg/kg 04/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/kg 04/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0143 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0191 mg/kg 04/25/13 08:27 04/25/13 19:46 Naphthalene N	ijperylene	ND		0.0799	0.0107	mg/Kg	(0)	04/25/13 08:27	04/25/13 19:46	1
Pyrene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Phenanthrene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Particle ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29-120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27-120 04/25/13 08:27 04/25/13 19:46	uoranthene	ND		0.0799	0.0167	mg/Kg	107	04/25/13 08:27	04/25/13 19:46	1
Phenanthrene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Chrysene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthylnaphthalene Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene Valenthylnaphthalene Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene Valenthylnaphthalene Valenthylnaphthalene Valenthylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Valenthylnaphthalene Valenthylnaphthale	aphthalene	ND		0.0799	0.0167	mg/Kg	100	04/25/13 08:27	04/25/13 19:46	1
Chrysene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46		ND		0.0799	0.0143	mg/Kg	10	04/25/13 08:27	04/25/13 19:46	1
Dibenz(a,h)anthracene ND 0.0799 0.00834 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 2-Methylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46 Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46	ene	ND		0.0799	0.0107	mg/Kg	12	04/25/13 08:27	04/25/13 19:46	1
Fluoranthene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0143 mg/Kg 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg 04/25/13 08:27 04/25/13 19:46 2-Methylnaphthalene ND 0.0799 0.0191 mg/Kg 04/25/13 08:27 04/25/13 19:46  Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46		ND		0.0799	0.0107	mg/Kg	12	04/25/13 08:27	04/25/13 19:46	1
Fluoranthene ND 0.0799 0.0107 mg/Kg = 04/25/13 08:27 04/25/13 19:46 Fluorene ND 0.0799 0.0143 mg/Kg = 04/25/13 08:27 04/25/13 19:46 Indeno[1,2,3-cd]pyrene ND 0.0799 0.0119 mg/Kg = 04/25/13 08:27 04/25/13 19:46 Naphthalene ND 0.0799 0.0107 mg/Kg = 04/25/13 08:27 04/25/13 19:46 2-Methylnaphthalene ND 0.0799 0.0191 mg/Kg = 04/25/13 08:27 04/25/13 19:46  Surrogate %Recovery Qualifier Limits Prepared Analyzed 2-Fluorobiphenyl (Surr) 62 29 - 120 04/25/13 08:27 04/25/13 19:46 Terphenyl-d14 (Surr) 82 13 - 120 04/25/13 08:27 04/25/13 19:46 Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46	)anthracene	ND		0.0799	0.00834	mg/Kg	II	04/25/13 08:27	04/25/13 19:46	1
Indeno[1,2,3-cd]pyrene		ND		0.0799	0.0107	mg/Kg	17	04/25/13 08:27	04/25/13 19:46	1
Naphthalene         ND         0.0799         0.0107 mg/Kg         P 04/25/13 08:27         04/25/13 19:46           2-Methylnaphthalene         ND         0.0799         0.0191 mg/Kg         P 04/25/13 08:27         04/25/13 19:46           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analyzed           2-Fluorobiphenyl (Surr)         62         29 - 120         04/25/13 08:27         04/25/13 19:46           Terphenyl-d14 (Surr)         82         13 - 120         04/25/13 08:27         04/25/13 19:46           Nitrobenzene-d5 (Surr)         58         27 - 120         04/25/13 08:27         04/25/13 19:46		ND		0.0799	0.0143	mg/Kg	11	04/25/13 08:27	04/25/13 19:46	1
Naphthalene         ND         0.0799         0.0107 mg/Kg         P 04/25/13 08:27         04/25/13 19:46           2-Methylnaphthalene         ND         0.0799         0.0191 mg/Kg         P 04/25/13 08:27         04/25/13 19:46           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analyzed           2-Fluorobiphenyl (Surr)         62         29 - 120         04/25/13 08:27         04/25/13 19:46           Terphenyl-d14 (Surr)         82         13 - 120         04/25/13 08:27         04/25/13 19:46           Nitrobenzene-d5 (Surr)         58         27 - 120         04/25/13 08:27         04/25/13 19:46	.3-cd]pyrene	ND		0.0799	0.0119	mg/Kg	11	04/25/13 08:27	04/25/13 19:46	1
2-Methylnaphthalene         ND         0.0799         0.0191 mg/Kg         04/25/13 08:27         04/25/13 19:46           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analyzed           2-Fluorobiphenyl (Surr)         62         29 - 120         04/25/13 08:27         04/25/13 19:46           Terphenyl-d14 (Surr)         82         13 - 120         04/25/13 08:27         04/25/13 19:46           Nitrobenzene-d5 (Surr)         58         27 - 120         04/25/13 08:27         04/25/13 19:46		ND		0.0799	0.0107	mg/Kg	100	04/25/13 08:27	04/25/13 19:46	1
2-Fluorobiphenyl (Surr)     62     29 - 120     04/25/13 08:27     04/25/13 19:46       Terphenyl-d14 (Surr)     82     13 - 120     04/25/13 08:27     04/25/13 19:46       Nitrobenzene-d5 (Surr)     58     27 - 120     04/25/13 08:27     04/25/13 19:46		ND		0.0799	0.0191	mg/Kg	п	04/25/13 08:27	04/25/13 19:46	1
Terphenyl-d14 (Surr)     82     13 - 120     04/25/13 08:27     04/25/13 19:46       Nitrobenzene-d5 (Surr)     58     27 - 120     04/25/13 08:27     04/25/13 19:46		%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
Terphenyl-d14 (Surr)     82     13 - 120     04/25/13 08:27     04/25/13 19:46       Nitrobenzene-d5 (Surr)     58     27 - 120     04/25/13 08:27     04/25/13 19:46	phenyl (Sum)	62		29 - 120				04/25/13 08:27	04/25/13 19:46	1
Nitrobenzene-d5 (Surr) 58 27 - 120 04/25/13 08:27 04/25/13 19:46		82		13 - 120				04/25/13 08:27	04/25/13 19:46	1
General Chemistry		58		27 - 120				04/25/13 08:27	04/25/13 19:46	1
	Chemistry									
Analyte Result Qualifier RL RL Unit D Prepared Analyzed		Result	Qualifier	RL	RL	Unit.	D	Prepared	Analyzed	Dil Fac
Percent Solids 83 0.10 0.10 % 04/25/13 08:25	olids	83		0.10	0.10	%			04/25/13 08:25	1

Client Sample ID: 1285 Dove

Date Collected: 04/16/13 14:45 Date Received: 04/24/13 08:15 Lab Sample ID: 490-25044-4

Matrix: Solid

Percent Solids: 94.8

Method: 8260B - Volatile Org	The same of the sa	(GC/MS) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	quamo	0.00228	0.000763		11	04/24/13 18:04	04/25/13 14:58	1
Ethylbenzene	0.000885	i.	0.00228	0.000763	mg/Kg	-61	04/24/13 18:04	04/25/13 14:58	4
Naphthalene	0.00261		0.00569	0.00194	mg/Kg		04/24/13 18:04	04/25/13 14:58	9
Toluene	0.00151	J	0.00228	0.000842	mg/Kg	a	04/24/13 18:04	04/25/13 14:58	1
Xylenes, Total	0.00263		0.00569	0.000763	7.5	23	04/24/13 18:04	04/25/13 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130				04/24/13 18:04	04/25/13 14:58	1
4-Bromofluorobenzene (Surr)	105		70 - 130				04/24/13 18:04	04/25/13 14:58	1
Dibromofluoromethane (Surr)	102		70 - 130				04/24/13 18:04	04/25/13 14:58	1
Toluene-d8 (Surr)	101		70 - 130				04/24/13 18:04	04/25/13 14:58	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/M	S)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0702	0.0105	mg/Kg	23	04/25/13 08:27	04/25/13 20:07	1
Acenaphthylene	ND		0.0702	0.00943	mg/Kg	300	04/25/13 08:27	04/25/13 20:07	1
Anthracene	ND		0.0702	0.00943	mg/Kg	300	04/25/13 08:27	04/25/13 20:07	1
Benzo[a]anthracene	ND		0.0702	0.0157	mg/Kg	12	04/25/13 08:27	04/25/13 20:07	3
Benzo[a]pyrene	ND		0.0702	0.0126	mg/Kg	30	04/25/13 08:27	04/25/13 20:07	1
Benzo[b]fluoranthene	ND		0.0702	0.0126	mg/Kg	177	04/25/13 08:27	04/25/13 20:07	1
Benzo[g,h,i]perylene	ND		0.0702	0.00943	mg/Kg	D)	04/25/13 08:27	04/25/13 20:07	1
Benzo[k]fluoranthene	ND		0.0702	0.0147	mg/Kg	D	04/25/13 08:27	04/25/13 20:07	1
1-Methylnaphthalene	0.204		0.0702	0.0147	mg/Kg	D	04/25/13 08:27	04/25/13 20:07	1
Pyrene	ND		0.0702	0.0126	mg/Kg	E	04/25/13 08:27	04/25/13 20:07	1
Phenanthrene	0.0948		0.0702	0.00943	mg/Kg	D	04/25/13 08:27	04/25/13 20:07	1
Chrysene	ND		0.0702	0.00943	mg/Kg	.01	04/25/13 08:27	04/25/13 20:07	- 1
Dibenz(a,h)anthracene	ND		0.0702	0.00734	mg/Kg	.01	04/25/13 08:27	04/25/13 20:07	- 1
Fluoranthene	ND		0.0702	0.00943	mg/Kg	n	04/25/13 08:27	04/25/13 20:07	1
Fluorene	0.0417	J	0.0702	0.0126	mg/Kg	T	04/25/13 08:27	04/25/13 20:07	1
Indeno[1,2,3-cd]pyrene	ND		0.0702	0.0105	mg/Kg	10	04/25/13 08:27	04/25/13 20:07	1
Naphthalene	0.0773		0.0702	0.00943	mg/Kg	.11	04/25/13 08:27	04/25/13 20:07	1
2-Methylnaphthalene	0.335		0.0702	0.0168	mg/Kg	13	04/25/13 08:27	04/25/13 20:07	1
Surrogate	%Recovery	Qualifler	Limits				Prepared	Analyzed	DII Fac
2-Fluorobiphenyl (Surr)	54	We start set A.	29 - 120				04/25/13 08:27	04/25/13 20:07	1
Terphenyl-d14 (Surr)	85		13 - 120				04/25/13 08:27	04/25/13 20:07	1
Nitrobenzene-d5 (Surr)	48		27 - 120				04/25/13 08:27	04/25/13 20:07	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95	-country	0.10	0.10		_	. Toparca	04/25/13 08:25	1
reident sollus	95		0.10	5.10	74			0 11 EU1 10 UU.EU	

Client Sample ID: 1245 Dove Date Collected: 04/17/13 14:15

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-5

Matrix: Solid

Percent Solids: 91.5

Method: 8260B - Volatile Org	Colored to the Colore		P.1	MATE	Made		Bernand	Analogue	DII F
Analyte		Qualifier	0.00240		Unit	D	Prepared 04/24/13 18:04	Analyzed	Dil Fac
Benzene	ND		12/17/20/20	0.000803	75.7	8		04/26/13 14:31	1
Ethylbenzene	ND		0.00240	0.000803		6	04/24/13 18:04	04/26/13 14:31	1
Naphthalene	ND		0.344		mg/Kg	b	04/24/13 17:29	04/26/13 15:33	
Toluene Xylenes, Total	ND ND		0.00240	0.000887	mg/Kg mg/Kg	b	04/24/13 18:04	04/26/13 14:31 04/26/13 14:31	1
1,00,000			1,000		3.13		5040.4		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				04/24/13 18:04	04/26/13 14:31	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130				04/24/13 17:29	04/26/13 15:33	1
4-Bromofluorobenzene (Surr)	151	X	70 - 130				04/24/13 18:04	04/26/13 14:31	1
4-Bromofluorobenzene (Surr)	107		70 - 130				04/24/13 17:29	04/26/13 15:33	1
Dibromofluoromethane (Surr)	99		70 - 130				04/24/13 18:04	04/26/13 14:31	7
Dibromofluoromethane (Surr)	94		70 - 130				04/24/13 17:29	04/26/13 15:33	1
Toluene-d8 (Surr)	104		70 - 130				04/24/13 18:04	04/26/13 14:31	1
Toluene-d8 (Surr)	101		70 - 130				04/24/13 17:29	04/26/13 15:33	
Method: 8270D - Semivolatile	e Organic Compou	inds (GC/M	S)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0720	0.0107	mg/Kg	D.	04/25/13 08:27	04/25/13 20:28	1
Acenaphthylene	0.0552	J	0.0720	0,00967	mg/Kg	10	04/25/13 08:27	04/25/13 20:28	1
Anthracene	ND		0.0720	0.00967	mg/Kg	13	04/25/13 08:27	04/25/13 20:28	- 4
Benzo[a]anthracene	ND		0,0720	0.0161	mg/Kg	123	04/25/13 08:27	04/25/13 20:28	1
Benzo[a]pyrene	0.382		0.0720	0.0129	mg/Kg	123	04/25/13 08:27	04/25/13 20:28	1
Benzo[b]fluoranthene	0.0966		0.0720	0.0129	mg/Kg	E	04/25/13 08:27	04/25/13 20:28	1
Benzo[g,h,i]perylene	0.187		0.0720	0.00967	mg/Kg	(2	04/25/13 08:27	04/25/13 20:28	1
Benzo[k]fluoranthene	0.0195	J	0.0720	0.0150	mg/Kg	Ti.	04/25/13 08:27	04/25/13 20:28	1
1-Methylnaphthalene	ND		0.0720	0.0150	mg/Kg	(0.0	04/25/13 08:27	04/25/13 20:28	1
Pyrene	ND		0.0720	0.0129	mg/Kg	10	04/25/13 08:27	04/25/13 20:28	1
Phenanthrene	ND		0.0720	0.00967	mg/Kg	100	04/25/13 08:27	04/25/13 20:28	1
Chrysene	0.119		0.0720	0.00967	mg/Kg	E	04/25/13 08:27	04/25/13 20:28	1
Dibenz(a,h)anthracene	ND		0.0720	0.00752	mg/Kg	11	04/25/13 08:27	04/25/13 20:28	1
Fluoranthene	ND		0.0720	0.00967	mg/Kg	107	04/25/13 08:27	04/25/13 20:28	1
Fluorene	ND		0.0720	0.0129	mg/Kg	10	04/25/13 08:27	04/25/13 20:28	1
Indeno[1,2,3-cd]pyrene	0.163		0.0720	0.0107	mg/Kg	41	04/25/13 08:27	04/25/13 20:28	1
Naphthalene	ND		0.0720	0.00967	mg/Kg	12	04/25/13 08:27	04/25/13 20:28	1
2-Methylnaphthalene	ND		0.0720	0.0172	7-17-7	п	04/25/13 08:27	04/25/13 20:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120				04/25/13 08:27	04/25/13 20:28	1
Terphenyl-d14 (Surr)	89		13 - 120				04/25/13 08:27	04/25/13 20:28	
Nitrobenzene-d5 (Surr)	63		27 - 120				04/25/13 08:27	04/25/13 20:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	RI	Unit	D	Prepared	Analyzed	Dil Fac

Analyte

Benzene

Ethylbenzene

Naphthalene

650 0.000871 mg/Kg 04/24/13 18:04 04/25/13 15:59 1
Prepared Analyzed Dil Fac
04/24/13 18:04 04/25/13 15:59 1
04/24/13 18:04 04/25/13 15:59 1
04/24/13 18:04 04/25/13 15:59 1
04/24/13 18:04 04/25/13 15:59 1
0.00 imits 0 - 13 0 - 13 0 - 13

RL

0.00260

0.00260

0.00650

MDL Unit

0.000871 mg/Kg

0.000871 mg/Kg

0.00221 mg/Kg

Result Qualifier

ND

ND

0.00373 J

Method: 8270D -	Caminalatila	Organic Compe	Nunde (CC/MS)
Wethou: oz/up *	Semivolatile	Ordanic Comb	Junus (GC/MS)

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

Method: 82/0D - Semivolati	ie Organic Compound	as (GC/MS	5)						
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0897	0.0134	mg/Kg	12	04/25/13 08:27	04/25/13 20:50	1
Acenaphthylene	ND		0.0897	0.0121	mg/Kg	(0)	04/25/13 08:27	04/25/13 20:50	1
Anthracene	ND		0.0897	0.0121	mg/Kg	(0)	04/25/13 08:27	04/25/13 20:50	1
Benzo[a]anthracene	ND		0.0897	0.0201	mg/Kg	D	04/25/13 08:27	04/25/13 20:50	1
Benzo[a]pyrene	ND		0.0897	0.0161	mg/Kg	B	04/25/13 08:27	04/25/13 20:50	1
Benzo[b]fluoranthene	ND		0.0897	0.0161	mg/Kg	D	04/25/13 08:27	04/25/13 20:50	1
Benzo[g,h,i]perylene	ND		0.0897	0.0121	mg/Kg	D	04/25/13 08:27	04/25/13 20:50	1
Benzo[k]fluoranthene	ND		0.0897	0.0188	mg/Kg	101	04/25/13 08:27	04/25/13 20:50	1
1-Methylnaphthalene	ND		0.0897	0.0188	mg/Kg	п	04/25/13 08:27	04/25/13 20:50	1
Pyrene	ND		0.0897	0.0161	mg/Kg	(0)	04/25/13 08:27	04/25/13 20:50	1
Phenanthrene	ND		0.0897	0.0121	mg/Kg	D	04/25/13 08:27	04/25/13 20:50	1
Chrysene	ND		0.0897	0.0121	mg/Kg	,00	04/25/13 08:27	04/25/13 20:50	1
Dibenz(a,h)anthracene	ND		0.0897	0.00938	mg/Kg	(0)	04/25/13 08:27	04/25/13 20:50	1
Fluoranthene	ND		0.0897	0.0121	mg/Kg	d	04/25/13 08:27	04/25/13 20:50	1
Fluorene	ND		0.0897	0.0161	mg/Kg	d	04/25/13 08:27	04/25/13 20:50	1
Indeno[1,2,3-cd]pyrene	ND		0.0897	0.0134	mg/Kg	o o	04/25/13 08:27	04/25/13 20:50	1
Naphthalene	ND		0.0897	0.0121	mg/Kg	Q.	04/25/13 08:27	04/25/13 20:50	1
2-Methylnaphthalene	ND		0.0897	0.0214	mg/Kg	(0)	04/25/13 08:27	04/25/13 20:50	1
Surrogate	%Recovery C	Qualifler	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 120				04/25/13 08:27	04/25/13 20:50	1
Terphenyl-d14 (Surr)	84		13 - 120				04/25/13 08:27	04/25/13 20:50	1
Nitrobenzene-d5 (Surr)	62		27 - 120				04/25/13 08:27	04/25/13 20:50	1

General	Chemis	try
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General Chemistry								
Analyte	Result Qualifier	RL	RL L	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74	0.10	0.10 9	%			04/25/13 08:25	1

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

Lab Sample ID: 490-24870-B-6-D MS

Matrix: Solid

Analysis Batch: 74897

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

Prep Batch: 74420

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.00646		0.0743	0.05936		mg/Kg	d	71	31 - 143
Ethylbenzene	0.00854		0.0743	0.05727		mg/Kg	0	66	23 - 161
Naphthalene	0.00257	J	0.0743	0.04694		mg/Kg	12	60	10 - 176
Toluene	0.0230		0.0743	0.07316		mg/Kg	ш	68	30 - 155
Xylenes, Total	0.0208		0.223	0.1677		mg/Kg	- 0	66	25 - 162

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: 490-24870-B-6-E MSD

Matrix: Solid

Analysis Batch: 74897

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 74420

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.00646		0.0470	0.04173		mg/Kg	U	75	31 - 143	35	50
Ethylbenzene	0.00854		0.0470	0.04077		mg/Kg	10	69	23 - 161	34	50
Naphthalene	0.00257	J	0.0470	0.03342		mg/Kg	10	66	10 - 176	34	50
Toluene	0.0230		0.0470	0.05052		mg/Kg	d	59	30 - 155	37	50
Xylenes, Total	0.0208		0.141	0.1199		mg/Kg	1.0	70	25 - 162	33	50

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 490-74897/6

Matrix: Solid

Analysis Batch: 74897

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

MB MB Analyte Result RL MDL Unit Prepared Analyzed Dil Fac 0.000670 mg/Kg 0.00200 04/25/13 12:24 Benzene ND 1 ND 0.00200 0.000670 mg/Kg 04/25/13 12:24 Ethylbenzene 0.001870 J Naphthalene 0.00500 0.00170 mg/Kg 04/25/13 12:24 Toluene ND 0.00200 0.000740 mg/Kg 04/25/13 12:24 Xylenes, Total ND 0.00500 0.000670 mg/Kg 04/25/13 12:24

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	106	70 - 130	04/25/13 12:24	1
4-Bromofluorobenzene (Surr)	105	70 - 130	04/25/13 12:24	1
Dibromofluoromethane (Surr)	104	70 - 130	04/25/13 12:24	1
Toluene-d8 (Surr)	100	70 - 130	04/25/13 12:24	1

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

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

Lab Sample ID: LCS 490-74897/3 Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA

Analysis Batch: 74897

Spike	LCS	LCS				%Rec.
Added	Result	Qualifier	Unit	D	%Rec	Limits
0.0500	0.05017		mg/Kg		100	75 - 127
0.0500	0.05219		mg/Kg		104	80 - 134
0.0500	0.04807		mg/Kg		96	69 - 150
0.0500	0.05082		mg/Kg		102	80 - 132
0.150	0.1599		mg/Kg		107	80 - 137
	Added 0.0500 0.0500 0.0500 0.0500	Added         Result           0.0500         0.05017           0.0500         0.05219           0.0500         0.04807           0.0500         0.05082	Added Result Qualifier 0.0500 0.05017 0.0500 0.05219 0.0500 0.04807 0.0500 0.05082	Added         Result Qualifier         Unit           0.0500         0.05017         mg/Kg           0.0500         0.05219         mg/Kg           0.0500         0.04807         mg/Kg           0.0500         0.05082         mg/Kg	Added         Result Qualifier         Unit D         D           0.0500         0.05017         mg/Kg           0.0500         0.05219         mg/Kg           0.0500         0.04807         mg/Kg           0.0500         0.05082         mg/Kg	Added         Result Qualifier         Unit Unit         D %Rec           0.0500         0.05017         mg/Kg         100           0.0500         0.05219         mg/Kg         104           0.0500         0.04807         mg/Kg         96           0.0500         0.05082         mg/Kg         102

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 490-74897/4

Matrix: Solid

Analysis Batch: 74897

C	ient	Sample	ID:	Lab	Control	Sample Dup	
					Pron Tu	ne Total/NA	

	Spike	LUSD	LUSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05957		mg/Kg		119	75 - 127	17	50
Ethylbenzene	0.0500	0.06259		mg/Kg		125	80 - 134	18	50
Naphthalene	0.0500	0.05698		mg/Kg		114	69 - 150	17	50
Toluene	0.0500	0.06004		mg/Kg		120	80 - 132	17	50
Xylenes, Total	0.150	0.1907		mg/Kg		127	80 - 137	18	50

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 490-75266/6

Matrix: Solid

Analysis Batch: 75266

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

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/26/13 13:00	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/26/13 13:00	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/26/13 13:00	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/26/13 13:00	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/26/13 13:00	1
		0.5							

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	70 - 130	04	/26/13 13:00	1
4-Bromofluorobenzene (Surr)	107	70 - 130	04	/26/13 13:00	1
Dibromofluoromethane (Surr)	104	70 - 130	04	/26/13 13:00	1
Taluene-d8 (Surr)	101	70 - 130	04	/26/13 13:00	1

# Project/Site: EEG Laurel Bay Site

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

Lab Sample ID: MB 490-75266/7

Matrix: Solid

Analysis Batch: 75266

Client	Sample	ID:	Method	Blank

Prep Type: Total/NA

	(46.00	355							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			04/26/13 13:30	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			04/26/13 13:30	1
Naphthalene	ND		0.250	0.0850	mg/Kg			04/26/13 13:30	1
Toluene	ND		0.100	0.0370	mg/Kg			04/26/13 13:30	1
Xylenes, Total	ND		0.250	0.0335				04/26/13 13:30	1
	4.2	***							

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	DII Fac
1,2-Dichloroethane-d4 (Surr)	107	70 - 130		04/26/13 13:30	1
4-Bromofluorobenzene (Surr)	105	70 - 130		04/26/13 13:30	7
Dibromofluoromethane (Surr)	106	70 - 130		04/26/13 13:30	1
Toluene-d8 (Surr)	101	70 - 130		04/26/13 13:30	1

Lab Sample ID: LCS 490-75266/3

Matrix: Solid

Analyte Benzene Ethylbenzene Naphthalene Toluene Xylenes, Total

Analysis Batch: 75266

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

Spike	LCS	LCS				%Rec.
Added	Result	Qualifier	Unit	D	%Rec	Limits
0.0500	0.05080		mg/Kg		102	75 - 127
0.0500	0.05095		mg/Kg		102	80 - 134
0.0500	0.04657		mg/Kg		93	69 - 150
0.0500	0.04965		mg/Kg		99	80 - 132
0.150	0.1559		ma/Ka		104	80 - 137

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 490-75266/4

Matrix: Solid

Analysis Batch: 75266

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05110		mg/Kg		102	75 - 127	1	50
Ethylbenzene	0.0500	0.05242		mg/Kg		105	80 _ 134	3	50
Naphthalene	0.0500	0.04727		mg/Kg		95	69 - 150	1	50
Toluene	0.0500	0.05145		mg/Kg		103	80 - 132	4	50
Xylenes, Total	0.150	0.1604		mg/Kg		107	80 - 137	3	50

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	105		70 - 130
Toluene-dB (Surr)	102		70 - 130

# Project/Site: EEG Laurel Bay Site

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

Lab Sample ID: MB 490-74873/1-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74873

	IMID	IMP							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Anthracene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		04/25/13 08:27	04/25/13 17:36	3
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	3
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Pyrene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Chrysene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	- 1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1.3
Fluorene	ND		0.0670	0.0120	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		04/25/13 08:27	04/25/13 17:36	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		04/25/13 08:27	04/25/13 17:36	t
	MO	MD							

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	DII Fac
2-Fluorobiphenyl (Surr)	61	29 - 120	04/25/13 08:27	04/25/13 17:36	1
Terphenyl-d14 (Surr)	78	13 - 120	04/25/13 08:27	04/25/13 17:36	1
Nitrobenzene-d5 (Surr)	58	27 - 120	04/25/13 08:27	04/25/13 17:36	1

Lab Sample ID: LCS 490-74873/2-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74873

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	1.67	1.283		mg/Kg		77	38 - 120
Anthracene	1.67	1.373		mg/Kg		82	46 - 124
Benzo[a]anthracene	1.67	1.331		mg/Kg		80	45 - 120
Benzo[a]pyrene	1.67	1.350		mg/Kg		81	45 - 120
Benzo[b]fluoranthene	1.67	1.361		mg/Kg		82	42 - 120
Benzo[g,h,i]perylene	1.67	1.374		mg/Kg		82	38 - 120
Benzo[k]fluoranthene	1,67	1.337		mg/Kg		80	42 - 120
1-Methylnaphthalene	1.67	1.215		mg/Kg		73	32 - 120
Pyrene	1.67	1.438		mg/Kg		86	43 - 120
Phenanthrene	1.67	1.341		mg/Kg		80	45 - 120
Chrysene	1.67	1.267		mg/Kg		76	43 - 120
Dibenz(a,h)anthracene	1.67	1.447		mg/Kg		87	32 - 128
Fluoranthene	1.67	1,332		mg/Kg		80	46 - 120
Fluorene	1.67	1.300		mg/Kg		78	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.387		mg/Kg		83	41 - 121
Naphthalene	1.67	1.107		mg/Kg		66	32 - 120
2-Methylnaphthalene	1.67	1.253		mg/Kg		75	28 - 120

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

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

Lab Sample ID: LCS 490-74873/2-A

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 74873

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	68		29 - 120
Terphenyl-d14 (Surr)	98		13 - 120
Nitrobenzene-d5 (Surr)	64		27 - 120

Lab Sample ID: 490-25044-1 MS

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: 1212 Cardinal Prep Type: Total/NA

Prep Batch: 74873

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		2.09	1.353		mg/Kg	11	65	25 - 120
Anthracene	ND		2.09	1.301		mg/Kg	13	62	28 - 125
Benzo[a]anthracene	ND		2.09	1.241		mg/Kg	12	59	23 - 120
Benzo[a]pyrene	ND		2.09	1,249		mg/Kg	- 13	60	15 - 128
Benzo[b]fluoranthene	ND		2.09	1,298		mg/Kg	$\exists$	62	12 - 133
Benzo[g,h,i]perylene	ND		2.09	1,243		mg/Kg	13	59	22 - 120
Benzo[k]fluoranthene	ND		2.09	1.253		mg/Kg	in.	60	28 - 120
1-Methylnaphthalene	ND		2.09	1,330		mg/Kg	12	64	10 - 120
Pyrene	ND		2.09	1.340		mg/Kg	D	64	20 - 123
Phenanthrene	ND		2.09	1.304		mg/Kg	п	62	21 - 122
Chrysene	0.0644	J	2.09	1.245		mg/Kg	D.	56	20 - 120
Dibenz(a,h)anthracene	ND		2.09	1.306		mg/Kg	13	62	12 - 128
Fluoranthene	ND		2.09	1,250		mg/Kg	12	60	10 - 143
Fluorene	ND		2.09	1.262		mg/Kg	177	60	20 - 120
Indeno[1,2,3-cd]pyrene	ND		2.09	1.274		mg/Kg	17	61	22 - 121
Naphthalene	ND		2.09	1.231		mg/Kg	17	59	10 - 120
2-Methylnaphthalene	ND		2.09	1.337		mg/Kg	- 11	64	13 - 120

MS MS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	52		29 - 120
Terphenyl-d14 (Surr)	68		13 - 120
Nitrobenzene-d5 (Surr)	57		27 - 120

Lab Sample ID: 490-25044-1 MSD

Matrix: Solid

Client Sample ID: 1212 Cardinal Prep Type: Total/NA

Analysis Batch: 74973		Actual Common Actual						Prep Batch: 74873			
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		2.10	1.532		mg/Kg	п	73	25 - 120	12	50
Anthracene	ND		2.10	1.525		mg/Kg	30	73	28 - 125	16	49
Benzo[a]anthracene	ND		2.10	1.446		mg/Kg	10	69	23 - 120	15	50
Benzo[a]pyrene	ND		2.10	1.456		mg/Kg	10	69	15 - 128	15	50
Benzo[b]fluoranthene	ND		2.10	1.666		mg/Kg	13	79	12 - 133	25	50
Benzo[g,h,i]perylene	ND		2.10	1,422		mg/Kg	13	68	22 - 120	13	50
Benzo[k]fluoranthene	ND		2.10	1.303		mg/Kg	Li	62	28 - 120	4	45
1-Methylnaphthalene	ND		2.10	1.503		mg/Kg	12	72	10 - 120	12	50
Pyrene	ND		2,10	1.568		mg/Kg	11	75	20 - 123	16	50
Phenanthrene	ND		2,10	1.548		mg/Kg	12	74	21 - 122	17	50
Chrysene	0.0644	J	2.10	1.478		mg/Kg	п	67	20 - 120	17	49

TestAmerica Job ID: 490-25044-1

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

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

Lab Sample ID: 490-25044-1 MSD

Matrix: Solid

Analysis Batch: 74973

Client Sample ID: 1212 Cardinal

Prep Type: Total/NA Prep Batch: 74873

Allalysis Datell. 14313									( ich	Dateil.	14012
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz(a,h)anthracene	ND		2.10	1.490		mg/Kg	-	71	12 - 128	13	50
Fluoranthene	ND		2.10	1.532		mg/Kg	П	73	10 - 143	20	50
Fluorene	ND		2.10	1.492		mg/Kg	П	71	20 - 120	17	50
Indeno[1,2,3-cd]pyrene	ND		2.10	1.446		mg/Kg	11	69	22 - 121	13	50
Naphthalene	ND		2.10	1.355		mg/Kg	17	65	10 - 120	10	50
2-Methylnaphthalene	ND		2.10	1.527		mg/Kg	17	73	13 - 120	13	50

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	53		29 - 120
Terphenyl-d14 (Surr)	75		13 - 120
Nitrobenzene-d5 (Surr)	60		27 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-25050-A-1 DU

Matrix: Solid

Analysis Batch: 74872

Client Sample ID: Duplicate

Prep Type: Total/NA

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	83		82		%		0.7	20

Prep Batch

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

1212 Cardinal

1245 Dove

### GC/MS VOA

Prep	Batch:	74420
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A CO. 1 CO.					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-24870-B-6-D MS	Matrix Spike	Total/NA	Solid	5035	
490-24870-B-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
Prep Batch: 74812					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch

Total/NA

Total/NA

Solid

Solid

5035

5035

#### Prep Batch: 74817

490-25044-1

490-25044-5

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method
490-25044-1	1212 Cardinal	Total/NA	Solid	5035
490-25044-2	1266 Dove	Total/NA	Solid	5035
490-25044-3	1424 Albatross	Total/NA	Solid	5035
490-25044-4	1285 Dove	Total/NA	Solid	5035
490-25044-5	1245 Dove	Total/NA	Solid	5035
490-25044-6	1445 Dove	Total/NA	Solid	5035

### Analysis Batch: 74897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	
490-24870-B-6-D MS	Matrix Spike	Total/NA	Solid	8260B	
490-24870-B-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
490-25044-2	1266 Dove	Total/NA	Solid	8260B	
490-25044-3	1424 Albatross	Total/NA	Solid	8260B	
490-25044-4	1285 Dove	Total/NA	Solid	8260B	
490-25044-6	1445 Dove	Total/NA	Solid	8260B	
LCS 490-74897/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-74897/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-74897/6	Method Blank	Total/NA	Solid	8260B	

#### Analysis Batch: 75266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	8260B	74812
490-25044-1	1212 Cardinal	Total/NA	Solid	8260B	74817
490-25044-5	1245 Dove	Total/NA	Solid	8260B	74812
490-25044-5	1245 Dove	Total/NA	Solid	8260B	74817
LCS 490-75266/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-75266/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-75266/6	Method Blank	Total/NA	Solid	8260B	
MB 490-75266/7	Method Blank	Total/NA	Solid	8260B	

# GC/MS Semi VOA

# Prep Batch: 74873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-1 MS	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-1 MSD	1212 Cardinal	Total/NA	Solid	3550C	
490-25044-2	1266 Dove	Total/NA	Solid	3550C	
490-25044-3	1424 Albatross	Total/NA	Solid	3550C	
490-25044-4	1285 Dove	Total/NA	Solid	3550C	

# Project/Site: EEG Laurel Bay Site

# GC/MS Semi VOA (Continued)

# Prep Batch: 74873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-5	1245 Dove	Total/NA	Solid	3550C	
490-25044-6	1445 Dove	Total/NA	Solid	3550C	
LCS 490-74873/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-74873/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 74973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-25044-1	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-1 MS	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-1 MSD	1212 Cardinal	Total/NA	Solid	8270D	74873
490-25044-2	1266 Dave	Total/NA	Solid	8270D	74873
490-25044-3	1424 Albatross	Total/NA	Solid	8270D	74873
490-25044-4	1285 Dove	Total/NA	Solid	8270D	74873
490-25044-5	1245 Dove	Total/NA	Solid	8270D	74873
490-25044-6	1445 Dove	Total/NA	Solid	8270D	74873
LCS 490-74873/2-A	Lab Control Sample	Total/NA	Solid	8270D	74873
MB 490-74873/1-A	Method Blank	Total/NA	Solid	8270D	74873

# **General Chemistry**

# Analysis Batch: 74872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
490-25044-1	1212 Cardinal	Total/NA	Solid	Moisture	
490-25044-2	1266 Dove	Total/NA	Solid	Moisture	
490-25044-3	1424 Albatross	Total/NA	Solid	Moisture	
490-25044-4	1285 Dove	Total/NA	Solid	Moisture	
490-25044-5	1245 Dove	Total/NA	Solid	Moisture	
490-25044-6	1445 Dove	Total/NA	Solid	Moisture	
490-25050-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

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

Client Sample ID: 1212 Cardinal

Date Collected: 04/15/13 15:15 Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-1

Matrix: Solid Percent Solids: 79.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74812	04/24/13 17:29	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 15:02	AF	TAL NSH
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 14:01	AF	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 18:19	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Lab Sample ID: 490-25044-2

Matrix: Solid Percent Solids: 97.1

Client Sample ID: 1266 Dove Date Collected: 04/16/13 15:15 Date Received: 04/24/13 08:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	74897	04/25/13 13:56	KK	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 19:24	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Client Sample ID: 1424 Albatross

Date Collected: 04/17/13 15:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-3

Matrix: Solid

Percent Solids: 83.3

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
	Total/NA	Analysis	8260B		1	74897	04/25/13 14:27	KK	TAL NSH
	Tolal/NA	Prep	3550C			74873	04/25/13 08:27	AK.	TAL NSH
	Total/NA	Analysis	8270D		(4)	74973	04/25/13 19:46	BS	TAL NSH
	Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TALNSH

Client Sample ID: 1285 Dove

Date Collected: 04/16/13 14:45

Date Received: 04/24/13 08:15

Lab Sample ID: 490-25044-4

Matrix: Solid

Percent Solids: 94.8

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Турв	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TALNSH
	Total/NA	Analysis	8260B		1	74897	04/25/13 14:58	KK	TAL NSH
	Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
	Total/NA	Analysis	8270D		- 1	74973	04/25/13 20:07	BS	TAL NSH
	Total/NA	Analysis	Moisture		4	74872	04/25/13 08:25	RS	TAL NSH

### Lab Chronicle

Client: Environmental Enterprise Group Project/Site: EEG Laurel Bay Site TestAmerica Job ID: 490-25044-1

Lab Sample ID: 490-25044-5

Matrix: Solid

Percent Solids: 91.5

# Client Sample ID: 1245 Dove

Date Collected: 04/17/13 14:15 Date Received: 04/24/13 08:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			74812	04/24/13 17:29	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 15:33	AF	TAL NSH
Total/NA	Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Total/NA	Analysis	8260B		1	75266	04/26/13 14:31	AF	TAL NSH
Total/NA	Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Total/NA	Analysis	8270D		1	74973	04/25/13 20:28	BS	TAL NSH
Total/NA	Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH

Lab Sample ID: 490-25044-6

Matrix: Solid

Percent Solids: 73.8

Client Sample ID: 1445 Dove

Date Collected: 04/18/13 13:45 Date Received: 04/24/13 08:15

Batch	Batch		Dilution	Batch	Prepared		
Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Prep	5035			74817	04/24/13 18:04	ML	TAL NSH
Analysis	8260B		1	74897	04/25/13 15:59	KK	TAL NSH
Prep	3550C			74873	04/25/13 08:27	AK	TAL NSH
Analysis	8270D		1	74973	04/25/13 20:50	BS	TAL NSH
Analysis	Moisture		1	74872	04/25/13 08:25	RS	TAL NSH
	Type Prep Analysis Prep Analysis	Prep 5035 Analysis 8260B Prep 3550C Analysis 8270D	Type Method Run Prep 5035 Analysis 8260B Prep 3550C Analysis 8270D	Type         Method         Run         Factor           Prep         5035         1           Analysis         8260B         1           Prep         3550C         1           Analysis         8270D         1	Type         Method         Run         Factor         Number           Prep         5035         74817           Analysis         8260B         1         74897           Prep         3550C         74873           Analysis         8270D         1         74973	Type         Method         Run         Factor         Number         or Analyzed           Prep         5035         74817         04/24/13 18:04           Analysis         8260B         1         74897         04/25/13 15:59           Prep         3550C         74873         04/25/13 08:27           Analysis         8270D         1         74973         04/25/13 20:50	Type         Method         Run         Factor         Number         or Analyzed         Analyst           Prep         5035         74817         04/24/13 18:04         ML           Analysis         8260B         1         74897         04/25/13 15:59         KK           Prep         3550C         74873         04/25/13 08:27         AK           Analysis         8270D         1         74973         04/25/13 20:50         BS

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: EEG Laurel Bay Site

TestAmerica Job ID: 490-25044-1

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

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

# Laboratory: TestAmerica Nashville

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

Authority	Program ACIL	EPA Region	Certification ID	Expiration Date 10-30-13
401.4	ISO/IEC 17025		0453.07	12-31-13
A2LA		4	41150	05-31-13
Alabama	State Program	10	41150 UST-087	
Alaska (UST)	State Program	g	AZ0473	07-24-13 05-05-13 *
Arizona	State Program	6		
Arkansas DEQ	State Program	9	88-0737 1168CA	04-25-13 * 10-31-13
California	NELAP	1	V LIBERTON	2000
Connecticut	State Program	4	PH-0220	12-31-13
Florida	NELAP		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
MAISCOLISILI				

KK

<sup>\*</sup> Expired certification is currently pending renewal and is considered valid.



# COOLER RECEIPT FORM



Cooler Received/Opened On: 4/24/2013 @0815	
1. Tracking # 9593 (last 4 digits, FedEx) 490	0-25044 Chain of Cus
Courier: Fed-Ex IR Gun ID: 14740456	
2. Temperature of rep. sample or temp blank when opened: A P Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen	en? YES NONA
4. Were custody seals on outside of cooler?  2. Front / BBUL	VES NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	YES)NONA
6. Were custody papers inside cooler?	YES NONA
certify that I opened the cooler and answered questions 1-6 (initial)	0
7. Were custody seals on containers: YES (IO) and Intact	YESNOIN
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pa	sper Other None
9. Cooling process: (ce) Ice-pack Ice (direct contact) Dry	ice Other None
10. Did all containers arrive in good condition (unbroken)?	(ES)NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	E9NONA
12. Did all container labels and tags agree with custody papers?	ESNONA
13a. Were VOA vials received?	(FES NO NA
b. Was there any observable headspace present in any VOA vial?	YESNO. (NA)
14. Was there a Trip Blank in this cooler? YESNO(NA) If multiple coolers, sequ	
certify that I unloaded the cooler and answered questions 7-14 (intial)	B
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH lev	el? YESNO. (NA)
b. Did the bottle labels indicate that the correct preservatives were used	~
	(YES NO NA
16. Was residual chlorine present?	YESNONA
	YESNONA
16. Was residual chlorine present?	YESNONA
16. Was residual chlorine present?  I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intia	YESNONA
16. Was residual chlorine present?  I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intian).  Were custody papers properly filled out (ink, signed, etc)?	YESNONA
16. Was residual chlorine present?  I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (Intia 17. Were custody papers properly filled out (Ink, signed, etc)?  18. Did you sign the custody papers in the appropriate place?	YESNONA  V  (E3NONA
16. Was residual chlorine present?  I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (Intia 17. Were custody papers properly filled out (Ink, signed, etc)?  18. Did you sign the custody papers in the appropriate place?  19. Were correct containers used for the analysis requested?	YESNONA  YESNONA  YESNONA  YESNONA

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Detail 1/23/13 0900 Fee of Party Property of the Control of the Co	sial instructions:  Method of Shipment.				1724 HIBATROSS 7/11/1/5/1345 3	4116/13 15/5	1212 CARDINAL YISHS 1505 5 X	Date Sampled  Date Sampled  Time Sampled  No. of Containers Shipped  Grab  Composite  Fleid Filtered  Ice  HNO <sub>3</sub> (Red Lisbel)  LICH (Blue-Lebel)		Sampler Signature:	Sampler Name: (Print) / R. R. H Ship in Pax No.: 07	email: rigalwee@eeginc.net	City/State/Zip: Ladson, SC 29456	Address: 10179 Highway 78	Client Name/Account #: EEG - SBG # 2449	STAMORICA Nashville Division Phone E LEADER IN ENVIRONMENTAL TESTING Nashville, TN 37204 Fax	
10 mg	Date					X		9.3 	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)  H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label)  None (Black Label)  Other (Specify) With Yellow (Groundwater  Wastswater  Drinking Water  Studge  Soil  Other (specify):	Matrix		1040-118-5	ומונה מרים א				Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404	Loc: 490 <b>2504</b>
0815	Time	h 50				X	XX	×	BTEX + Napth - 8260	Analyze For:	Project#:	TA Quote#: Project®: Laurel Bay Housing Project	PO# 1035	Site State: SC	Enforcement Action? Yes	Compliance Monitoring? Yes	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?	14 pg /2/2
		ч 2	1			<i>-</i>			RUSH TAT (Pre-Schedul Standard TAT Fax Results Send QC with report	0					les No	No		0/2013

7	guished by:  Date Time Received by TestAmerica:	Date Time Received by: 4/23/AS 0900 Frdex					0 1445 DOUR 4/18/13/1345 5 X 21	1245 DOUR 4/1/1/13/14/5 5 x 2 21	Dove 4/18/18/14/5 5 X	Date Sampled  Time Sampled  No. of Containers Shipped  Grab  Composite  Field Filtered  Ice  HNO <sub>3</sub> (Red Label)  MCH (Blos Label)  H <sub>3</sub> SO <sub>4</sub> Plastic (Yellow Label)  None (Bleck Label)  None (Bleck Label)		Sampler Signature:	Sampler Name: (Print)	Telephone Number: 843.412.2097 A Fax No.: 843 - 879-040	ilt: mcelwee@eeginc.net	City/State/Zlp: Ladson, SC 29458	Address: 10179 Highway 78	Client Name/Account #: EEG - SBG # 2449	Phone: 615-726-0177  Phone: 615-726-0177  2960 Foster Creighton  Toll Free: 800-765-0980  Fax: 615-726-3404	
1-1	N + rt/13 Of 15	Date Time	FEDEX		1		XXX	XXX	XXX	Groundwater Wastewater Drinking Water Sludge Soil Other (specify): BTEX + Napth - 8260	Matrix	Project#:	Project ID: Lau	-0 40/ TA Quote #:		Site State: SC				Loc: 490 <b>25044</b>
			Temperature Upon Receipt: VOCs Free of Headspace?	7							Analyze For:		Project ID: Laurel Bay Housing Project		1033		Enforcement Action?	Compliance Monitoring?	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?	Przotz
			ч				Pa	ae	26	RUSH TAT (Pre-Schedul Standard TAT Fax Results Sead-QC with report	0						Yes No	Yes No	A/3	

lob Number: 490-25044-1

# Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Login Number: 25044

Creator: Buckingham, Paul

List Source: TestAmerica Nashville List Number: 1

Creator: Buckingham, Paul			
Question	Answer	Comment	
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td> <td></td>	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.	N/A		
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**

NON-HAZARDOUS MANIFEST  1. Generator's US EPA ID No. Manifest Doc No.					2. Page 1 of 7/633				77	
3. Generator's Mailing Address: Generator's Mailing Address:		nerator's Site Address (If different than mailing):				st Number	01519139			
LAUREL BAY HOUSING BEAUFORT, SC 29904 4. Generator's Phone 843-879-0411					B. State Generator's ID					
			ID Number	Number  C. State Transporter's ID						
7. Transporter 2 Company Name 8.  9. Designated Facility Name and Site Address 10. HICKORY HILL LANDFILL 2621 LOW COUNTRY DRIVE RIDGELAND, SC 29936  11. Description of Waste Materials					D. Transporter's Phone (81/3) 522 1/5  E. State Transporter's ID  F. Transporter's Phone					
										10. US EPA
			H. State Facility Phone 843-987-4643							
			12.0 No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.	J. Mi	sc. Comme	nts	
		a. HEATING OIL TANK FILLED WITH SAND  WM Profile # 102655SC			1	201	8.60	TON	7/6333	
<b>b</b> .										
WM Profile #					11.00					
c.  WM Profile #										
d. WM Profile a				100	i i					
J. Additional Descriptions for Materials Listed Above			K. Dispo	K. Disposal Location						
			Cell				Level		_	
15. Special Handling Instructions and UST'S FROM DIZGE DOUR	d Additional Information	85 DOUE:	ROSS	4) 12° 5) 14	45 D	OUE	1	38 I 08 Ca		
Purchase Order #		EMERGENCY C	ONTACT / PI	HONE NO.:						
<ol> <li>GENERATOR'S CERTIFICATE:</li> <li>I hereby certify that the above-described accurately described, classified and</li> </ol>							, have been	fully and	d	
Printed Name Timoth	4. What/8	Signature "On beh		Thoule	That	DEY.	Month	Day	Ye	
17. Transporter 1 Acknowledgemen	t of Receipt of Material		-/	Tip	1	1	I terret I	1/	T v.	
Printed Name 8/M/13 PRAH Shan			PI	100/			Month	/4/	Ye /	
18. Transporter 2 Acknowledgement of Receipt of Materials  Printed Name  Signature							Month	Day	Ye	
<ol> <li>Certificate of Final Treatment/D certify, on behalf of the above liste applicable laws, regulations, permits</li> </ol>	d treatment facility, tha		ledge, the a	above-describ	ed waste wa	s managed in	compliance	with al	1	
20. Facility Owner or Operator: Cer		on-hazardous materials	covered by	this manifest.						
Printed Name Tour Cofeld Signature Tour Cofeld Your Coful					ild		Month	Day 3	Yea /J	
White-TREATMENT, STORAGE, DISP Pink-FACILITY USE (		Blue- GENERATO Gold- TRANSPORT		1	Yell	ow- GENERAT	OR #1 COP	1		

# Appendix C Regulatory Correspondence





#### Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

November 18, 2014

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

RE:

No Further Action

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 Tanks (USTs) 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 and agrees there is no indication of soil or groundwater contamination on these properties, and therefore no further investigation is required at this time.

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

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

Sincerely,

Kent Krieg

That is the

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)



#### Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

Attachment to:

**Krieg to Drawdy** 

Subject: NFA

Dated 11/18/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (2 addresses/2 tanks)

1416 Albatross 1424 Albatross