SUMMARY REPORT
107 COBIA DRIVE (FORMERLY 878 COBIA 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** 

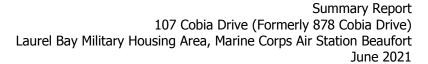


Appendix D

# **Table of Contents**

1.0	INTRODUC	TION 1
1.1 1.2		ND INFORMATION
2.0	SAMPLING	ACTIVITIES AND RESULTS3
2.1 2.2 2.3 2.4	SOIL ANALY GROUNDWA	VAL AND SOIL SAMPLING
3.0	PROPERTY	<b>STATUS</b> 5
4.0	REFERENC	<b>ES</b> 5
Table Table		Tables  Laboratory Analytical Results - Soil  Laboratory Analytical Results - Groundwater
		Appendices
Appen Appen Appen	ndix B	Multi-Media Selection Process for LBMH UST Assessment Report Laboratory Analytical Report - Groundwater

Regulatory Correspondence





#### **List of Acronyms**

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank
VISL vapor intrusion screening level



#### 1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 107 Cobia Drive (Formerly 878 Cobia 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 107 Cobia Drive (Formerly 878 Cobia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 878 Cobia Drive* (MCAS Beaufort, 2011). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

#### 2.1 UST Removal and Soil Sampling

On November 24, 2010, a single 280 gallon heating oil UST was removed from the front landscaped bed area adjacent to the front concrete porch at 107 Cobia Drive (Formerly 878 Cobia Drive). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There





was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'9" 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 107 Cobia Drive (Formerly 878 Cobia Drive) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 107 Cobia Drive (Formerly 878 Cobia Drive) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

#### 2.3 Groundwater Sampling

On November 30, 2015, a temporary monitoring well was installed at 107 Cobia Drive (Formerly 878 Cobia Drive), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).



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

### 2.4 Groundwater Analytical Results

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

The groundwater results collected from 107 Cobia Drive (Formerly 878 Cobia Drive) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

#### 3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 107 Cobia Drive (Formerly 878 Cobia Drive). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

#### 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2011. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 878

Cobia Drive, Laurel Bay Military Housing Area, February 2011.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.





- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

# **Tables**



# Table 1 Laboratory Analytical Results - Soil 107 Cobia Drive (Formerly 878 Cobia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 11/24/10	
Volatile Organic Compounds Analy	zed 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 A	Analyzed by EPA Method 8270D (mg/kg	)	
Benzo(a)anthracene	0.66	0.344	
Benzo(b)fluoranthene	0.66	1.04	
Benzo(k)fluoranthene	0.66	0.497	
Chrysene	0.66	0.556	
Dibenz(a,h)anthracene	0.66	0.271	

#### Notes:

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

<sup>&</sup>lt;sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).

# Table 2 Laboratory Analytical Results - Groundwater 107 Cobia Drive (Formerly 878 Cobia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) <sup>(2)</sup>	Results Sample Collected 11/30/15	
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (μg	/L)		
Benzene	5	16.24	ND	
Ethylbenzene	700	45.95	ND	
Naphthalene	25	29.33	ND	
Toluene	1000	105,445	ND	
Xylenes, Total	10,000	2,133	ND	
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270[	) (μg/L)		
Benzo(a)anthracene	10	NA	ND	
Benzo(b)fluoranthene	10	NA	ND	
Benzo(k)fluoranthene	10	NA	ND	
Chrysene	10	NA	ND	
Dibenz(a,h)anthracene	10	NA	ND	

#### Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

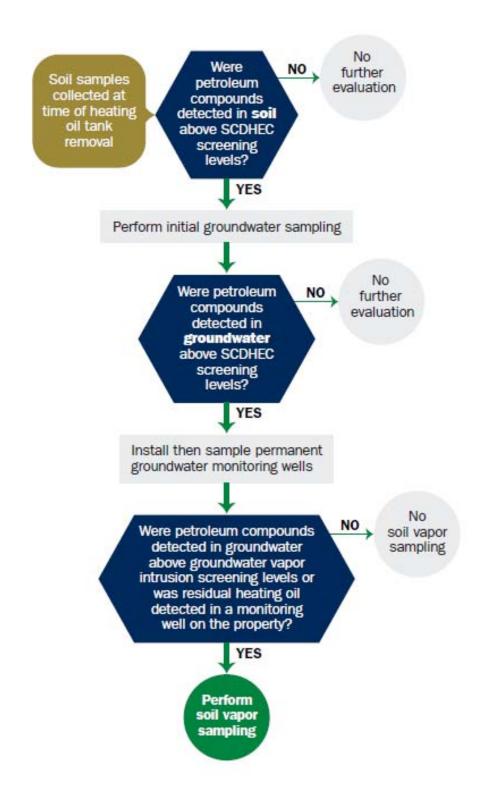
μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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

# 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

# I. OWNERSHIP OF UST (S)

	mmanding Officer Attn: NI	REAO (Craig Ehde)
Owner Name (Corporation	n, 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		<u> Marine Co</u>	rps Air	Station,	Beaufort,	SC
Facility Name or Compan	y Site Identifier					,
878 Cobia Lane, Street Address or State Ro	Laurel Bay Militand (as applicable)	ary Housin	g Area	***************************************		<del></del>
Beaufort,	Beaufort					
City	County					

Attachment 2

# III. INSURANCE INFORMATION

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

	878Cobia	$\perp$
duct(ex. Gas. Kerosene)	Heating oil	L
	280 gal	
<u> </u>	Late 1950s	
nstruction Material(ex. Steel, FRP)	Steel	
nth/Year of Last Use	Mid 1980s	
	6'9"	
	No	
erfill Prevention Equipment Y/N	No	
thod of Closure Removed/Filled	Removed	
e Tanks Removed/Filled	11/24/10	
ible Corrosion or Pitting Y/N	Yes	
ible Holes Y/N	Yes	
•	•	
	erfill Prevention Equipment Y/N  thod of Closure Removed/Filled  e Tanks Removed/Filled  ible Corrosion or Pitting Y/N  thod of disposal for any USTs removed from the ST 878Cobia was removed from the	pacity(ex. 1k, 2k)

# VII. PIPING INFORMATION

	Steel	
Construction Material(ex. Steel, FRP)	& Copper	
Distance from UST to Dispenser	N/A	
Number of Dispensers	N/A	
Type of System Pressure or Suction	Suction	
Was Piping Removed from the Ground? Y/N	Yes	
Visible Corrosion or Pitting Y/N	Yes	
Visible Holes Y/N	No	
Age	Late 1950s	-
If any corrosion, pitting, or holes were observed,	describe the location and extent for	each piping
Corrosion and pitting were found pipe. Copper supply and return	on the surface of the	
Corrosion and pitting were found	on the surface of the	
Corrosion and pitting were found	d on the surface of the ines were sound.  IPTION AND HISTORY	steel ve
VIII. BRIEF SITE DESCR The USTs at the residences are co	ines were sound.  IPTION AND HISTORY  Instructed of single was	steel ve
Corrosion and pitting were found pipe. Copper supply and return 1  VIII. BRIEF SITE DESCR The USTs at the residences are co	ines were sound.  IPTION AND HISTORY  Instructed of single was	steel ve
Corrosion and pitting were found pipe. Copper supply and return D  VIII. BRIEF SITE DESCR The USTs at the residences are common and formerly contained fuel oil to	ines were sound.  IPTION AND HISTORY  Instructed of single was	steel ve
Corrosion and pitting were found pipe. Copper supply and return D  VIII. BRIEF SITE DESCR The USTs at the residences are common and formerly contained fuel oil to	ines were sound.  IPTION AND HISTORY  Instructed of single was	steel ve
Corrosion and pitting were found pipe. Copper supply and return D  VIII. BRIEF SITE DESCR The USTs at the residences are common and formerly contained fuel oil to	ines were sound.  IPTION AND HISTORY  Instructed of single was	steel ve

# IX. SITE CONDITIONS

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

# X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009001

B.

·	<b>I</b>		1	1		1	1
Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
878Cobia	Excav at fill end	Soil	Sandy	6'9"	11/24/10 1045 hrs	P. Shaw	
				į			
8							
9							
10							
11							
12							
13							
14							
15							
16			•				
17							-
18							
19			,				
20							

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

# XI. SAMPLING METHODOLOGY

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

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

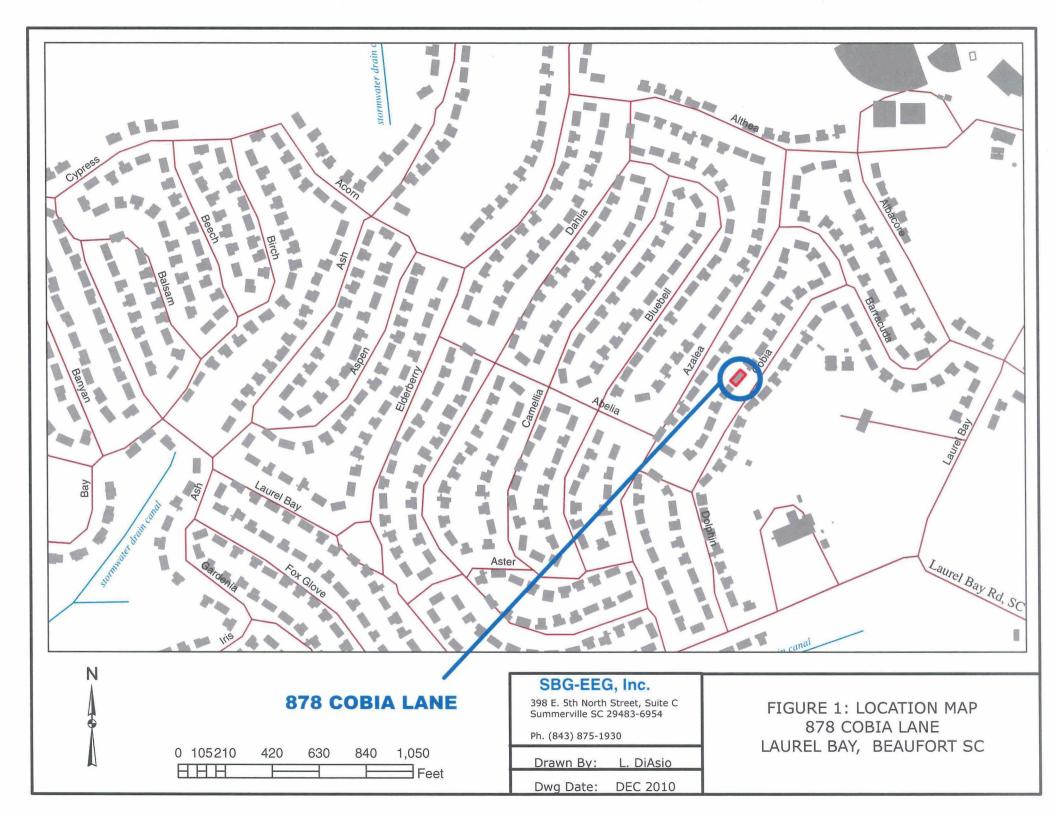
# XII. RECEPTORS

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

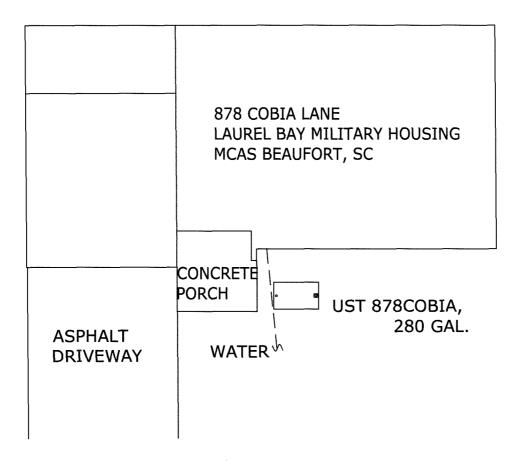
# XIII. SITE MAP

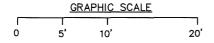
You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)







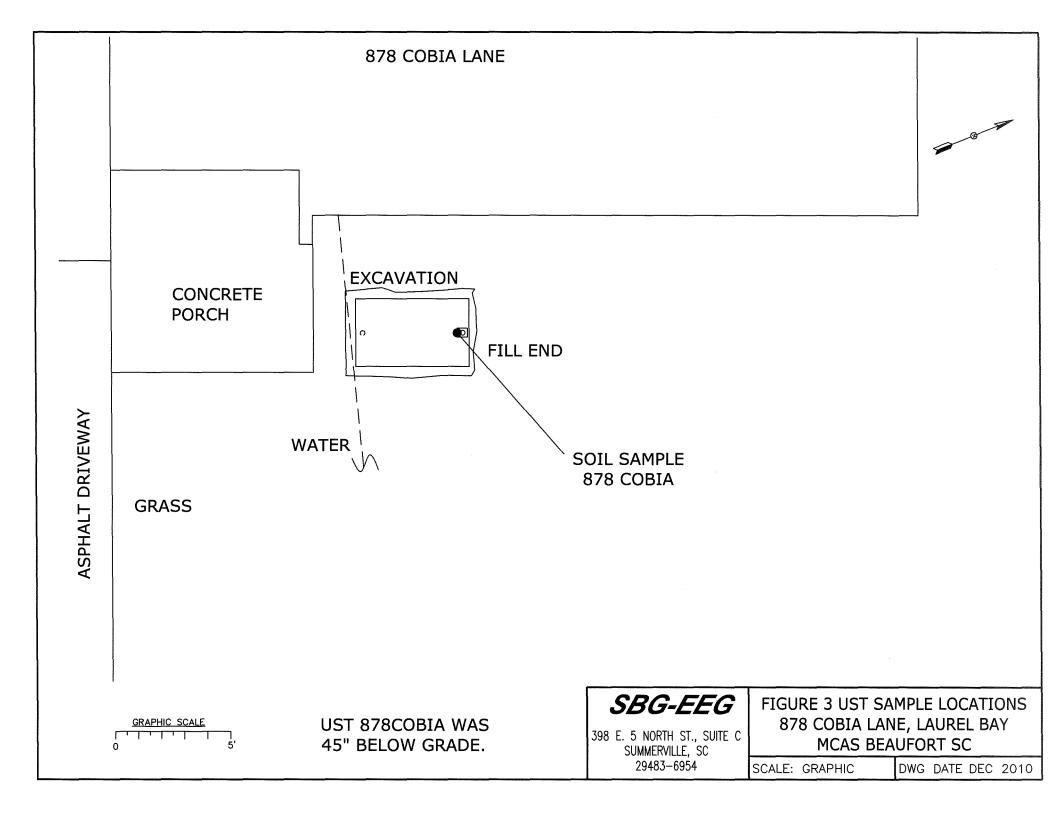


SBG-EEG

398 E. 5 NORTH ST., SUITE C SUMMERVILLE, SC 29483-6954 FIGURE 2 SITE MAP 878 COBIA LANE, LAUREL BAY MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE DEC 2010





Picture 1: Location of UST 878Cobia.



Picture 2: UST 878Cobia 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.

			T	T	T	1	T
CoC UST	878Cobia			<u></u>		<u> </u>	
Benzene	ND						
Toluene	ND						
Ethylbenzene	ND						
Xylenes	ND						
Naphthalene	ND						
Benzo (a) anthracene	0.344 mg/kg						
Benzo (b) fluoranthene	1.04 mg/kg						
Benzo (k) fluoranthene	0.497 mg/kg						
Chrysene	0.556 mg/kg						
Dibenz (a, h) anthracene	0.271 mg/kg						
TPH (EPA 3550)							
СоС							
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.

is present, indicate the measured thickness to the nearest 0.01 feet.								
СоС	RBSL	W-1	W-2	W -3	W -4			
	(µg/l)							
Free Product								
	None							
Thickness								
Benzene	5							
Toluene	1,000							
Ethylbenzene	700							
Xylenes	10,000							
Total BTEX	N/A							
MTBE	40							
Naphthalene	25							
Benzo (a) anthracene	10							
Benzo (b) flouranthene	10							
Benzo (k) flouranthene	10							
Chrysene	10							
Dibenz (a, h)								
anthracene	10		ĺ					
dittilaccité								
EDB	.05				, man and a second			
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)





December 14, 2010

10:41:28AM

Client:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn:

Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Nbr:

[none]

P/O Nbr: Date Received: 1005 11/26/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
867 Cobia	NTK3173-01	11/22/10 11:00
870 Cobia	NTK3173-02	11/22/10 15:15
871 Cobia	NTK3173-03	11/23/10 10:15
877 Cobia	NTK3173-04	11/23/10 15:15
878 Cobia	NTK3173-05	11/24/10 10:45

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

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Additional Laboratory Comments:

REVISED REPORT: 12/14/10 KAH - To report correct sample dates per COC. This report replaces the one generated on 12/13/10 @ 13:21.

South Carolina Certification Number: 84009

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

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Kem & A Hage

Report Approved By:

Ken A. Hayes

Senior Project Manager



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

10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTK3173-01 (867 Co	obia - Soil) Sar	npled:	11/22/10 11	:00						
General Chemistry Parameters										
% Dry Solids	94.4		%	0.500	0.500	1	11/30/10 09:09	SW-846	HLB	10K5604
Volatile Organic Compounds by EPA	A Method 8260B	}								
Benzene	ND		mg/kg đry	0.00131	0.00238	1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Ethylbenzene	ND		mg/kg dry	0.00116	0.00238	1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Naphthalene	ND		mg/kg dry	0.00202	0.00594	1	12/01/10 20:12	SW846 8260B	МЈН Н	10K5219
Toluene	ND		mg/kg dry	0.00106	0.00238	1	12/01/10 20:12	SW846 8260B	МЈН Н	10K5219
Xylenes, total	ND		mg/kg dry	0.00226	0.00594	1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Surr: 1,2-Dichloroethane-d4 (67-138%)	81 %					1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Surr: Dibromofluoromethane (75-125%)	90 %					1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Surr: Toluene-d8 (76-129%)	104 %					1	12/01/10 20:12	SW846 8260B	мјн н	10K5219
Surr: 4-Bromofluorobenzene (67-147%)	102 %					1	12/01/10 20:12	SW846 8260B	MJH H	10K5219
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0148	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Acenaphthylene	ND		mg/kg dry	0.0212	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Anthracene	ND		mg/kg dry	0.00952	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Benzo (a) anthracene	ND		mg/kg dry	0.0116	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Benzo (a) pyrene	ND		mg/kg dry	0.00846	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Benzo (b) fluoranthene	ND		mg/kg dry	0.0402	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00952	0.0709	l	12/01/10 21:19	SW846 8270D	KJP	10K5670
Benzo (k) fluoranthene	ND		mg/kg dry	0.0391	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Chrysene	ND		mg/kg dry	0.0328	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0159	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Fluoranthene	ND		mg/kg dry	0.0116	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Fluorene	ND		mg/kg dry	0.0212	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0328	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Naphthalene	ND		mg/kg dry	0.0148	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Phenanthrene	ND		mg/kg dry	0.0106	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Pyrene	ND		mg/kg dry	0.0243	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
l-Methylnaphthalene	ND		mg/kg dry	0.0127	0.0709	1	12/01/10 21:19	SW846 8270D	KJP	10K5670
2-Methylnaphthalene	ND		mg/kg dry	0.0222	0.0709	]	12/01/10 21:19	SW846 8270D	KJP	10K5670
Surr: Terphenyl-d14 (18-120%)	67 %					1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Surr: 2-Fluorobiphenyl (14-120%)	68 %					1	12/01/10 21:19	SW846 8270D	KJP	10K5670
Surr: Nitrobenzene-d5 (17-120%)	66 %					I	12/01/10 21:19	SW846 8270D	KJP	10K5670



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

10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

#### ANALYTICAL REPORT

			¥724	MDI	MDI	Dilution	Analysis	3.7.43		D
Analyte	Result	Flag	Units	MDL	MRL	Factor	Date/Time	Method	Analyst	Batch
Sample ID: NTK3173-02 (870 C General Chemistry Parameters	obia - Soil) Sai	npled:	11/22/10 15	5:15						
% Dry Solids	94.9		%	0.500	0.500	1	11/30/10 09:09	SW-846	HLB	10K5604
Volatile Organic Compounds by EPA	A Method 8260B	1								
Benzene	ND		mg/kg dry	0.00121	0.00220	1	12/01/10 20:43	SW846 8260B	МЈН Н	10K5219
Ethylbenzene	ND		mg/kg dry	0.00108	0.00220	1	12/01/10 20:43	SW846 8260B	МЈН Н	10K5219
Naphthalene	ND		mg/kg dry	0.00187	0.00550	1	12/01/10 20:43	SW846 8260B	МЈН Н	10K5219
Toluene	ND		mg/kg dry	0.000979	0.00220	1	12/01/10 20:43	SW846 8260B	мјн н	10K5219
Xylenes, total	ND		mg/kg dry	0.00209	0.00550	1	12/01/10 20:43	SW846 8260B	мјн н	10K5219
Surr: 1,2-Dichloroethane-d4 (67-138%)	81 %					1	12/01/10 20:43	SW846 8260B	мјн н	10K5219
Surr: Dibromofluoromethane (75-125%)	91 %					1	12/01/10 20:43	SW846 8260B	мјн н	10K5219
Surr: Toluene-d8 (76-129%)	104 %					1	12/01/10 20:43	SW846 8260B	мјн н	10K5219
Surr: 4-Bromofluorobenzene (67-147%)	102 %					1	12/01/10 20:43	SW846 8260B	MJHH	10K5219
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0147	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Acenaphthylene	ND		mg/kg dry	0.0210	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Anthracene	ND		mg/kg dry	0.00943	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Benzo (a) anthracene	ND		mg/kg dry	0.0115	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Benzo (a) pyrene	0.140		mg/kg dry	0.00838	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Benzo (b) fluoranthene	0.138		mg/kg dry	0.0398	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00943	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Benzo (k) fluoranthene	ND		mg/kg dry	0.0388	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Chrysene	0.0789		mg/kg dry	0.0325	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0157	0.0702	ı	12/01/10 21:39	SW846 8270D	KJP	10K5670
Fluoranthene	ND		mg/kg dry	0.0115	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Fluorene	ND		mg/kg dry	0.0210	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0325	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Naphthalene	ND		mg/kg dry	0.0147	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Phenanthrene	ND		mg/kg dry	0.0105	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Pyrene	ND		mg/kg dry	0.0241	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
1-Methylnaphthalene	ND		mg/kg dry	0.0126	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
2-Methylnaphthalene	ND		mg/kg dry	0.0220	0.0702	1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Surr: Terphenyl-d14 (18-120%)	75 %					1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Surr: 2-Fluorobiphenyl (14-120%)	67 %					1	12/01/10 21:39	SW846 8270D	KJP	10K5670
Surr: Nitrobenzene-d5 (17-120%)	67 %					I	12/01/10 21:39	SW846 8270D	KJP	10K5670



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

10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
·				1 <i>E</i>						
Sample ID: NTK3173-03 (871 Co General Chemistry Parameters	)D1a - 5011) 5ai	npiea:	11/23/10 10	):15						
% Dry Solids	96.6		%	0.500	0.500	1	11/30/10 09:09	SW-846	HLB	10K5604
Volatile Organic Compounds by EPA	A Method 8260E	<b>,</b>								
Benzene	ND		mg/kg dry	0.00120	0.00218	1	12/01/10 21:14	SW846 8260B	МЈН Н	10K5219
Ethylbenzene	ND		mg/kg dry	0.00107	0.00218	1	12/01/10 21:14	SW846 8260B	мјн н	10K5219
Naphthalene	ND		mg/kg dry	0.00185	0.00544	1	12/01/10 21:14	SW846 8260B	МЈН Н	10K5219
Toluene	ND		mg/kg dry	0.000968	0.00218	1	12/01/10 21:14	SW846 8260B	МЈН Н	10K5219
Xylenes, total	ND		mg/kg dry	0.00207	0.00544	1	12/01/10 21:14	SW846 8260B	мјн н	10K5219
Surr: 1,2-Dichloroethane-d4 (67-138%)	82 %					1	12/01/10 21:14	SW846 8260B	мјн н	10K5219
Surr: Dibromofluoromethane (75-125%)	91 %					1	12/01/10 21:14	SW846 8260B	мјн н	10K5219
Surr: Toluene-d8 (76-129%)	94 %					1	12/01/10 21:14	SW846 8260B	млн н	10K5219
Surr: 4-Bromofluorobenzene (67-147%)	105 %					I	12/01/10 21:14	SW846 8260B	MJH H	10K5219
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0144	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Acenaphthylene	ND		mg/kg dry	0.0205	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Anthracene	ND		mg/kg dry	0.00925	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Benzo (a) anthracene	ND		mg/kg dry	0.0113	0.0688	l	12/01/10 21:58	SW846 8270D	KJP	10K5670
Benzo (a) pyrene	ND		mg/kg dry	0.00822	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Benzo (b) fluoranthene	ND		mg/kg dry	0.0390	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00925	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Benzo (k) fluoranthene	ND		mg/kg dry	0.0380	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Chrysene	ND		mg/kg dry	0.0318	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Dibenz (a,h) anthracene	ND	*	mg/kg dry	0.0154	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Fluoranthene	ND		mg/kg dry	0.0113	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Fluorene	ND		mg/kg dry	0.0205	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0318	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Naphthalene	ND		mg/kg dry	0.0144	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Phenanthrene	ND		mg/kg dry	0.0103	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
Pyrene	ND		mg/kg dry	0.0236	0.0688	1	12/01/10 21:58	SW846 8270D	KJP	10K5670
1-Methylnaphthalene	ND		mg/kg dry	0.0123	0.0688	ł	12/01/10 21:58	SW846 8270D	KJP	10K5670
2-Methylnaphthalene	ND		mg/kg dry	0.0216	0.0688		12/01/10 21:58	SW846 8270D	KJP	10K5670
Surr: Terphenyl-d14 (18-120%)	56 %						12/01/10 21:58	SW846 8270D	KJP	10K5670
Surr: 2-Fluorobiphenyl (14-120%)	51 %					=	12/01/10 21:58	SW846 8270D	KJP	10K5670
Surr: Nitrobenzene-d5 (17-120%)	49 %					1	12/01/10 21:58	SW846 8270D	KJP	10K5670



10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTK3173-04 (877 Co	obia - Soil) Sar	npled:	11/23/10 15	:15						
% Dry Solids	90.0		%	0.500	0.500	1	11/30/10 09:09	SW-846	HLB	10K5604
Volatile Organic Compounds by EPA	A Method 8260B									
Benzene	ND		mg/kg dry	0.00127	0.00231	1	12/03/10 15:46	SW846 8260B	МЈН Н	10L0802
Ethylbenzene	ND		mg/kg dry	0.00113	0.00231	1	12/03/10 15:46	SW846 8260B	МЈН Н	10L0802
Naphthalene	ND		mg/kg dry	0.00196	0.00577	1	12/03/10 15:46	SW846 8260B	МЈН Н	10L0802
Toluene	ND		mg/kg dry	0.00103	0.00231	1	12/03/10 15:46	SW846 8260B	МЈН Н	10L0802
Xylenes, total	ND		mg/kg dry	0.00219	0.00577	1	12/03/10 15:46	SW846 8260B	МЈН Н	10L0802
Surr: 1,2-Dichloroethane-d4 (67-138%)	100 %					1	12/03/10 15:46	SW846 8260B	мјн н	10L0802
Surr: Dibromofluoromethane (75-125%)	101 %					1	12/03/10 15:46	SW846 8260B	мЈН Н	10L0802
Surr: Toluene-d8 (76-129%)	105 %					1	12/03/10 15:46	SW846 8260B	мјн н	10L0802
Surr: 4-Bromofluorobenzene (67-147%)	101 %					1	12/03/10 15:46	SW846 8260B	MJH H	10L0802
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0152	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Acenaphthylene	ND		mg/kg dry	0.0217	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Anthracene	ND		mg/kg dry	0.00979	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Benzo (a) anthracene	ND		mg/kg dry	0.0120	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Benzo (a) pyrene	ND		mg/kg dry	0.00870	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Benzo (b) fluoranthene	ND		mg/kg dry	0.0413	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00979	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Benzo (k) fluoranthene	ND		mg/kg dry	0.0402	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Chrysene	ND		mg/kg dry	0.0337	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0163	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Fluoranthene	ND		mg/kg dry	0.0120	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Fluorene	ND		mg/kg dry	0.0217	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0337	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Naphthalene	ND		mg/kg dry	0.0152	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Phenanthrene	ND		mg/kg dry	0.0109	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Pyrene	ND		mg/kg dry	0.0250	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
I-Methylnaphthalene	ND		mg/kg dry	0.0130	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
2-Methylnaphthalene	ND		mg/kg dry	0.0228	0.0729	1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Surr: Terphenyl-d14 (18-120%)	67 %					1	12/01/10 22:17	SW846 8270D	KJP	10K5670
Surr: 2-Fluorobiphenyl (14-120%)	67 %						12/01/10 22:17	SW846 8270D	KJP	10K5670
Surr: Nitrobenzene-d5 (17-120%)	65 %					1	12/01/10 22:17	SW846 8270D	KJP	10K5670



10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

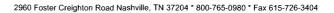
Project Number:

[none]

11/26/10 08:00 Received:

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Analyst	Batch
Sample ID: NTK3173-05 (878 C	obia - Soil) Sar	npled:	11/24/10 10	:45						
General Chemistry Parameters										
% Dry Solids	94.2		%	0.500	0.500	1	11/30/10 09:09	SW-846	HLB	10K5604
Volatile Organic Compounds by EPA	A Method 8260B									
Benzene	ND		mg/kg dry	0.00129	0.00235	1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Ethylbenzene	ND		mg/kg dry	0.00115	0.00235	I	12/03/10 16:16	SW846 8260B	МЈН Н	10L0802
Naphthalene	ND		mg/kg dry	0.00200	0.00587	1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Toluene	ND		mg/kg dry	0.00104	0.00235	1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Xylenes, total	ND		mg/kg dry	0.00223	0.00587	1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Surr: 1,2-Dichloroethane-d4 (67-138%)	101 %					I	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Surr: Dibromofluoromethane (75-125%)	102 %					1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Surr: Toluene-d8 (76-129%)	108 %					1	12/03/10 16:16	SW846 8260B	мјн н	10L0802
Surr: 4-Bromofluorobenzene (67-147%)	106 %					1	12/03/10 16:16	SW846 8260B	MJH H	10L0802
Polyaromatic Hydrocarbons by EPA	8270D									
Acenaphthene	ND		mg/kg dry	0.0147	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Acenaphthylene	ND		mg/kg dry	0.0210	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Anthracene	ND		mg/kg dry	0.00946	0.0704	l	12/01/10 22:37	SW846 8270D	KJP	10K5670
Benzo (a) anthracene	0.344		mg/kg dry	0.0116	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Benzo (a) pyrene	0.383		mg/kg dry	0.00841	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Benzo (b) fluoranthene	1.04		mg/kg dry	0.0399	0.0704	l	12/01/10 22:37	SW846 8270D	KJP	10K5670
Benzo (g,h,i) perylene	0.889		mg/kg dry	0.00946	0.0704	J	12/01/10 22:37	SW846 8270D	KJP	10K5670
Benzo (k) fluoranthene	0.497		mg/kg dry	0.0389	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Chrysene	0.556		mg/kg dry	0.0326	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Dibenz (a,h) anthracene	0.271		mg/kg dry	0.0158	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Fluoranthene	0.404		mg/kg dry	0.0116	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Fluorene	ND		mg/kg dry	0.0210	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Indeno (1,2,3-cd) pyrene	0.802		mg/kg dry	0.0326	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Naphthalene	ND		mg/kg dry	0.0147	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Phenanthrene	ND		mg/kg dry	0.0105	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Pyrene	0.539		mg/kg dry	0.0242	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
l-Methylnaphthalene	ND		mg/kg dry	0.0126	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
2-Methylnaphthalene	ND		mg/kg dry	0.0221	0.0704	1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Surr: Terphenyl-d14 (18-120%)	66 %					1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Surr: 2-Fluorobiphenyl (14-120%)	68 %					1	12/01/10 22:37	SW846 8270D	KJP	10K5670
Surr: Nitrobenzene-d5 (17-120%)	64 %					1	12/01/10 22:37	SW846 8270D	KJP	10K5670





10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

## SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polyaromatic Hydrocarbons by EPA	8270D						
SW846 8270D	10K5670	NTK3173-01	30.05	1.00	12/01/10 14:25	SAS	EPA 3550C
SW846 8270D	10K5670	NTK3173-02	30.18	1.00	12/01/10 14:25	SAS	EPA 3550C
SW846 8270D	10K5670	NTK3173-03	30.24	1.00	12/01/10 14:25	SAS	EPA 3550C
SW846 8270D	10K5670	NTK3173-04	30.65	1.00	12/01/10 14:25	SAS	EPA 3550C
SW846 8270D	10K5670	NTK3173-05	30.29	1.00	12/01/10 14:25	SAS	EPA 3550C
Volatile Organic Compounds by EP.	A Method 8260B						
SW846 8260B	10K5219	NTK3173-01	4.46	5.00	11/22/10 11:00	СНН	EPA 5035
SW846 8260B	10K5219	NTK3173-02	4.79	5.00	11/22/10 15:15	СНН	EPA 5035
SW846 8260B	10K5219	NTK3173-03	4.76	5.00	11/23/10 10:15	СНН	EPA 5035
SW846 8260B	10L0802	NTK3173-04	4.81	5.00	11/23/10 15:15	СНН	EPA 5035
SW846 8260B	10L0802	NTK3173-05	4.52	5.00	11/23/10 10:45	СНН	EPA 5035



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

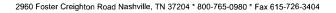
Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by	EPA Method 8260B					
10K5219-BLK1						
Benzene	<0.00110		mg/kg wet	10K5219	10K5219-BLK1	12/01/10 12:35
Ethylbenzene	< 0.000980		mg/kg wet	10K5219	10K5219-BLK1	12/01/10 12:35
Naphthalene	< 0.00170		mg/kg wet	10K5219	10K5219-BLK1	12/01/10 12:35
Toluene	< 0.000890		mg/kg wet	10K5219	10K5219-BLK1	12/01/10 12:35
Xylenes, total	< 0.00190		mg/kg wet	10K5219	10K5219-BLK1	12/01/10 12:35
Surrogate: 1,2-Dichloroethane-d4	81%			10K5219	10K5219-BLK1	12/01/10 12:35
Surrogate: Dibromofluoromethane	91%			10K5219	10K5219-BLK1	12/01/10 12:35
Surrogate: Toluene-d8	102%			10K5219	10K5219-BLK1	12/01/10 12:35
Surrogate: 4-Bromofluorobenzene	101%			10K5219	10K5219-BLK1	12/01/10 12:35
10L0802-BLK1						
Benzene	<0.00110		mg/kg wet	10L0802	10L0802-BLK1	12/03/10 13:47
Ethylbenzene	< 0.000980		mg/kg wet	10L0802	10L0802-BLK1	12/03/10 13:47
Naphthalene	< 0.00170		mg/kg wet	10L0802	10L0802-BLK1	12/03/10 13:47
Toluene	< 0.000890		mg/kg wet	10L0802	10L0802-BLK1	12/03/10 13:47
Xylenes, total	< 0.00190		mg/kg wet	10L0802	10L0802-BLK1	12/03/10 13:47
Surrogate: 1,2-Dichloroethane-d4	99%			10L0802	10L0802-BLK1	12/03/10 13:47
Surrogate: Dibromofluoromethane	101%			10L0802	10L0802-BLK1	12/03/10 13:47
Surrogate: Toluene-d8	102%			10L0802	10L0802-BLK1	12/03/10 13:47
Surrogate: 4-Bromofluorobenzene	98%			10L0802	10L0802-BLK1	12/03/10 13:47
10L0802-BLK2						
Benzene	< 0.0550		mg/kg wet	10L0802	10L0802-BLK2	12/03/10 14:17
Ethylbenzene	< 0.0490		mg/kg wet	10L0802	10L0802-BLK2	12/03/10 14:17
Naphthalene	< 0.0850		mg/kg wet	10L0802	10L0802-BLK2	12/03/10 14:17
Toluene	< 0.0445		mg/kg wet	10L0802	10L0802-BLK2	12/03/10 14:17
Xylenes, total	< 0.0950		mg/kg wet	10L0802	10L0802-BLK2	12/03/10 14:17
Surrogate: 1,2-Dichloroethane-d4	95%			10L0802	10L0802-BLK2	12/03/10 14:17
Surrogate: Dibromofluoromethane	97%			10L0802	10L0802-BLK2	12/03/10 14:17
Surrogate: Toluene-d8	103%			10L0802	10L0802-BLK2	12/03/10 14:17
Surrogate: 4-Bromofluorobenzene	96%			10L0802	10L0802-BLK2	12/03/10 14:17
Polyaromatic Hydrocarbons by E	PA 8270D					
10K5670-BLK1						
Accnaphthene	< 0.0140		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Acenaphthylene	< 0.0200		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Anthracene	< 0.00900		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Benzo (a) anthracene	< 0.0110		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Benzo (a) pyrene	< 0.00800		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Benzo (b) fluoranthene	< 0.0380		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Benzo (g,h,i) perylene	< 0.00900		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01
Benzo (k) fluoranthene	< 0.0370		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01





10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

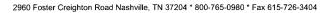
Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time	
Polyaromatic Hydrocarbons by	EPA 8270D						
10K5670-BLK1							
Chrysene	< 0.0310		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Dibenz (a,h) anthracene	< 0.0150		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Fluoranthene	< 0.0110		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Fluorene	< 0.0200		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Indeno (1,2,3-cd) pyrene	< 0.0310		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Naphthalene	< 0.0140		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Phenanthrene	< 0.0100		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Pyrene	< 0.0230		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
1-Methylnaphthalene	< 0.0120		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
2-Methylnaphthalene	< 0.0210		mg/kg wet	10K5670	10K5670-BLK1	12/01/10 20:01	
Surrogate: Terphenyl-d14	78%			10K5670	10K5670-BLK1	12/01/10 20:01	
Surrogate: 2-Fluorobiphenyl	83%			10K5670	10K5670-BLK1	12/01/10 20:01	
Surrogate: Nitrobenzene-d5	82%			10K5670	10K5670-BLK1	12/01/10 20:01	





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NTK3173

11/26/10 08:00

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

## PROJECT QUALITY CONTROL DATA

#### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10K5604-DUP1										
% Dry Solids	88.2	89.9		%	2	20	10K5604	NTK3151-01		11/30/10 09:09



10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name: Laurel Bay Housing Project

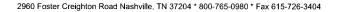
Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by E	PA Method 8260B							
10K5219-BS1								
Benzene	50.0	51.4		ug/kg	103%	78 - 126	10K5219	12/01/10 11:03
Ethylbenzene	50.0	58.0		ug/kg	116%	79 - 130	10K5219	12/01/10 11:03
Naphthalene	50.0	55.5		ug/kg	111%	72 - 150	10K5219	12/01/10 11:03
Toluene	50.0	53.5		ug/kg	107%	76 - 126	10K5219	12/01/10 11:03
Xylenes, total	150	167		ug/kg	112%	80 - 130	10K5219	12/01/10 11:03
Surrogate: 1,2-Dichloroethane-d4	50.0	41.1			82%	67 - 138	10K5219	12/01/10 11:03
Surrogate: Dibromofluoromethane	50.0	45.9			92%	75 - 125	10K5219	12/01/10 11:03
Surrogate: Toluene-d8	50.0	47.9			96%	76 - 129	10K5219	12/01/10 11:03
Surrogate: 4-Bromofluorobenzene	50.0	49.8			100%	67 - 147	10K5219	12/01/10 11:03
10L0802-BS1								
Benzene	50.0	52.3		ug/kg	105%	78 - 126	10L0802	12/03/10 11:05
Ethylbenzene	50.0	53.5		ug/kg	107%	79 - 130	10L0802	12/03/10 11:05
Naphthalene	50.0	54.0		ug/kg	108%	72 - 150	10L0802	12/03/10 11:05
Toluene	50.0	55.1		ug/kg	110%	76 - 126	10L0802	12/03/10 11:05
Xylenes, total	150	163		ug/kg	109%	80 - 130	10L0802	12/03/10 11:05
Surrogate: 1,2-Dichloroethane-d4	50.0	48.8			98%	67 - 138	10L0802	12/03/10 11:05
Surrogate: Dibromofluoromethane	50.0	51.8			104%	75 - 125	10L0802	12/03/10 11:05
Surrogate: Toluene-d8	50.0	50.4			101%	76 - 129	10L0802	12/03/10 11:05
Surrogate: 4-Bromofluorobenzene	50.0	50.4			101%	67 - 147	10L0802	12/03/10 11:05
Polyaromatic Hydrocarbons by EP	A 8270D							
10K5670-BS1								
Acenaphthene	1.67	1.22		mg/kg wet	73%	49 - 120	10K5670	12/01/10 20:21
Acenaphthylene	1.67	1.28		mg/kg wet	77%	52 - 120	10K5670	12/01/10 20:21
Anthracene	1.67	1.39		mg/kg wet	84%	58 - 120	10K5670	12/01/10 20:21
Benzo (a) anthracene	1.67	1.39		mg/kg wet	83%	57 - 120	10K5670	12/01/10 20:21
Benzo (a) pyrene	1.67	1.38		mg/kg wet	83%	55 - 120	10K5670	12/01/10 20:21
Benzo (b) fluoranthene	1.67	1.44		mg/kg wet	86%	51 - 123	10K5670	12/01/10 20:21
Benzo (g,h,i) perylene	1.67	1.19		mg/kg wet	72%	49 - 121	10K5670	12/01/10 20:21
Benzo (k) fluoranthene	1.67	1.30		mg/kg wet	78%	42 - 129	10K5670	12/01/10 20:21
Chrysene	1.67	1.32		mg/kg wet	79%	55 - 120	10K5670	12/01/10 20:21
Dibenz (a,h) anthracene	1.67	1.30		mg/kg wet	78%	50 - 123	10K5670	12/01/10 20:21
Fluoranthene	1.67	1.40		mg/kg wet	84%	58 - 120	10K5670	12/01/10 20:21
Fluorene	1.67	1.32		mg/kg wet	79%	54 - 120	10K5670	12/01/10 20:21
Indeno (1,2,3-cd) pyrene	1.67	1.30		mg/kg wet	78%	50 - 122	10K5670	12/01/10 20:21
Naphthalene	1.67	1.14		mg/kg wet	68%	28 - 120	10K5670	12/01/10 20:21
Phenanthrene	1.67	1.36		mg/kg wet	81%	56 - 120	10K5670	12/01/10 20:21
Pyrene	1.67	1.20		mg/kg wet	72%	56 - 120	10K5670	12/01/10 20:21
I-Methylnaphthalene	1.67	1.02		mg/kg wet	61%	36 - 120	10K5670	12/01/10 20:21
2-Methylnaphthalene	1.67	1.07		mg/kg wet	64%	36 - 120	10K5670	12/01/10 20:21





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

11/26/10 08:00

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

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Datc/Time
Polyaromatic Hydrocarbons by EPA 8	270D							
10K5670-BS1								
Surrogate: Terphenyl-d14	1.67	1.09			66%	18 - 120	10K5670	12/01/10 20:21
Surrogate: 2-Fluorobiphenyl	1.67	1.09			65%	14 - 120	10K5670	12/01/10 20:21
Surrogate: Nitrobenzene-d5	1.67	1.02			61%	17 - 120	10K5670	12/01/10 20:21



10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA	A Method 8	3260B										
10K5219-BSD1												
Benzene		51.0		ug/kg	50.0	102%	78 - 126	1	50	10K5219		12/01/10 11:34
Ethylbenzene		56.5		ug/kg	50.0	113%	79 - 130	3	50	10K5219		12/01/10 11:34
Naphthalene		55.2		ug/kg	50.0	110%	72 - 150	0.5	50	10K5219		12/01/10 11:34
Toluene		53.3		ug/kg	50.0	107%	76 - 126	0.5	50	10K5219		12/01/10 11:34
Xylenes, total		163		ug/kg	150	109%	80 - 130	3	50	10K5219		12/01/10 11:34
Surrogate: 1,2-Dichloroethane-d4		40.3		ug/kg	50.0	81%	67 - 138			10K5219		12/01/10 11:34
Surrogate: Dibromofluoromethane		45.5		ug/kg	50.0	91%	75 - 125			10K5219		12/01/10 11:34
Surrogate: Toluene-d8		48.3		ug/kg	50.0	97%	76 - 129			10K5219		12/01/10 11:34
Surrogate: 4-Bromofluorobenzene		50.4		ug/kg	50.0	101%	67 - 147			10K5219		12/01/10 11:34
10L0802-BSD1												
Benzene		52.9		ug/kg	50.0	106%	78 - 126	1	50	10L0802		12/03/10 11:36
Ethylbenzene		53.7		ug/kg	50.0	107%	79 - 130	0.5	50	10L0802		12/03/10 11:36
Naphthalene		54.0		ug/kg	50.0	108%	72 - 150	0.09	50	10L0802		12/03/10 11:36
Toluene		56.1		ug/kg	50.0	112%	76 - 126	2	50	10L0802		12/03/10 11:36
Xylenes, total		164		ug/kg	150	109%	80 - 130	0.3	50	10L0802		12/03/10 11:36
Surrogate: 1,2-Dichloroethane-d4		48.7		ug/kg	50.0	97%	67 - 138			10L0802		12/03/10 11:36
Surrogate: Dibromofluoromethane		50.8		ug/kg	50.0	102%	75 - 125			10L0802		12/03/10 11:36
Surrogate: Toluene-d8		50.7		ug/kg	50.0	101%	76 - 129			10L0802		12/03/10 11:36
Surrogate: 4-Bromofluorobenzene		51.0		ug/kg	50.0	102%	67 - 147			10L0802		12/03/10 11:36



10179 Highway 78 Ladson, SC 29456

Tom McElwee

Attn

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

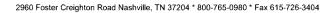
Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by l	EPA Method 826	0B								
10K5219-MS1										
Benzene	ND	0.0606		mg/kg dry	0.0609	100%	42 - 141	10K5219	NTK3149-31	12/01/10 21:44
Ethylbenzene	ND	0.0690		mg/kg dry	0.0609	113%	21 - 165	10K5219	NTK3149-31	12/01/10 21:44
Naphthalene	ND	0.0547		mg/kg dry	0.0609	90%	10 - 160	10K5219	NTK3149-31	12/01/10 21:44
Toluene	ND	0.0662		mg/kg dry	0.0609	109%	45 - 145	10K5219	NTK3149-31	12/01/10 21:44
Xylenes, total	ND	0.195		mg/kg dry	0.183	107%	31 - 159	10K5219	NTK3149-31	12/01/10 21:44
Surrogate: 1,2-Dichloroethane-d4		37.2		ug/kg	50.0	74%	67 - 138	10K5219	NTK3149-31	12/01/10 21:44
Surrogate: Dibromofluoromethane		44.8		ug/kg	50.0	90%	75 - 125	10K5219	NTK3149-31	12/01/10 21:44
Surrogate: Toluene-d8		49.6		ug/kg	50.0	99%	76 - 129	10K5219	NTK3149-31	12/01/10 21:44
Surrogate: 4-Bromofluorobenzene		51.5		ug/kg	50.0	103%	67 - 147	10K5219	NTK3149-31	12/01/10 21:44
10L0802-MS1										
Benzene	ND	0.0508		mg/kg dry	0.0513	99%	42 - 141	10L0802	NTL0373-09	12/03/10 21:55
Ethylbenzene	ND	0.0502		mg/kg dry	0.0513	98%	21 - 165	10L0802	NTL0373-09	12/03/10 21:55
Naphthalene	ND	0.0472		mg/kg dry	0.0513	92%	10 - 160	10L0802	NTL0373-09	12/03/10 21:55
Toluene	0.00160	0.0539		mg/kg dry	0.0513	102%	45 - 145	10L0802	NTL0373-09	12/03/10 21:55
Xylenes, total	0.00451	0.156		mg/kg dry	0.154	99%	31 - 159	10L0802	NTL0373-09	12/03/10 21:55
Surrogate: 1,2-Dichloroethane-d4		49.8		ug/kg	50.0	100%	67 - 138	10L0802	NTL0373-09	12/03/10 21:55
Surrogate: Dibromofluoromethane		52.1		ug/kg	50.0	104%	75 - 125	10L0802	NTL0373-09	12/03/10 21:55
Surrogate: Toluene-d8		50.6		ug/kg	50.0	101%	76 - 129	10L0802	NTL0373-09	12/03/10 21:55
Surrogate: 4-Bromofluorobenzene		49.8		ug/kg	50.0	100%	67 - 147	10L0802	NTL0373-09	12/03/10 21:55
Polyaromatic Hydrocarbons by E	PA 8270D									
10K5670-MS1										
Acenaphthene	ND	1.09		mg/kg dry	1.76	62%	42 - 120	10K5670	NTK3173-01	12/01/10 20:41
Acenaphthylene	ND	1.18		mg/kg dry	1.76	67%	32 - 120	10K5670	NTK3173-01	12/01/10 20:41
Anthracene	ND	1.25		mg/kg dry	1.76	71%	10 - 200	10K5670	NTK3173-01	12/01/10 20:41
Benzo (a) anthracene	ND ·	1.17		mg/kg dry	1.76	67%	41 - 120	10K5670	NTK3173-01	12/01/10 20:41
Benzo (a) pyrene	ND	1.19		mg/kg dry	1.76	68%	33 - 121	10K5670	NTK3173-01	12/01/10 20:41
Benzo (b) fluoranthene	ND	1.31		mg/kg dry	1.76	75%	26 - 137	10K5670	NTK3173-01	12/01/10 20:41
Benzo (g,h,i) perylene	ND	1.05		mg/kg dry	1.76	60%	21 - 124	10K5670	NTK3173-01	12/01/10 20:41
Benzo (k) fluoranthene	ND	1.07		mg/kg dry	1.76	61%	14 - 140	10K5670	NTK3173-01	12/01/10 20:41
Chrysene	ND	1.14		mg/kg dry	1.76	65%	28 - 123	10K5670	NTK3173-01	12/01/10 20:41
Dibenz (a,h) anthracene	ND	1.16		mg/kg dry	1.76	66%	25 - 127	10K5670	NTK3173-01	12/01/10 20:41
Fluoranthene	ND	1.28		mg/kg dry	1.76	72%	38 - 120	10K5670	NTK3173-01	12/01/10 20:41
Fluorene	ND	1.18		mg/kg dry	1.76	67%	41 - 120	10K5670	NTK3173-01	12/01/10 20:41
Indeno (1,2,3-cd) pyrene	ND	1.12		mg/kg dry	1.76	64%	25 - 123	10K5670	NTK3173-01	12/01/10 20:41
Naphthalene	ND	1.02		mg/kg dry	1.76	58%	25 - 120	10K5670	NTK3173-01	12/01/10 20:41
Phenanthrene	ND	1.22		mg/kg dry	1.76	69%	37 - 120	10K5670	NTK3173-01	12/01/10 20:41





10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

Work Order:

NTK3173

11/26/10 08:00

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

## PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EF	PA 8270D								
10K5670-MS1									
Pyrene	ND	1.06	mg/kg dry	1.76	60%	29 - 125	10K5670	NTK3173-01	12/01/10 20:41
1-Methylnaphthalene	ND	0.905	mg/kg dry	1.76	51%	19 - 120	10K5670	NTK3173-01	12/01/10 20:41
2-Methylnaphthalene	ND	0.996	mg/kg dry	1.76	57%	11 - 120	10K5670	NTK3173-01	12/01/10 20:41
Surrogate: Terphenyl-d14		0.970	mg/kg dry	1.76	55%	18 - 120	10K5670	NTK3173-01	12/01/10 20:41
Surrogate: 2-Fluorobiphenyl		1.03	mg/kg dry	1.76	59%	14 - 120	10K5670	NTK3173-01	12/01/10 20:41
Surrogate: Nitrobenzene-d5		0.949	mg/kg dry	1.76	54%	17 - 120	10K5670	NTK3173-01	12/01/10 20:41



10179 Highway 78 Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name: Laurel Bay Housing Project

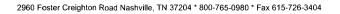
Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Ebylhenzene   ND   0.669	Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Benuce	Volatile Organic Compounds by	EPA Method	8260B										
Benuce	10K5219-MSD1												
Nighthalene		ND	0.0575		mg/kg dry	0.0597	96%	42 - 141	5	50	10K5219	NTK3149-31	12/01/10 22:15
Tolucine ND 0.0633 mg/kg dry 0.079 1069, 45-145 4 50 10K5219 NTK3149-31 1201/10 22-15 Xylens, total ND 0.180 mg/kg dry 0.179 1049, 31-159 5 50 10K5219 NTK3149-31 1201/10 22-15 Xylens, total ND 0.180 mg/kg dry 0.179 1049, 31-159 5 50 10K5219 NTK3149-31 1201/10 22-15 Xirroguce Libimondinoromethine  4 4.2 ug/kg 50 085 85 7-138 5 1 10K5219 NTK3149-31 1201/10 22-15 Xirroguce Libimondinoromethine  5 0.2 ug/kg 50 085 85 7-147 5 1 10K5219 NTK3149-31 1201/10 22-15 Xirroguce Libimondinoromethine  5 0.2 ug/kg 50 085 85 7-147 5 1 10K5219 NTK3149-31 1201/10 22-15 Xirroguce Libimondinoromethine  5 0.0 ug/kg 50 085 85 7-147 5 1 10K5219 NTK3149-31 1201/10 22-15 Xirroguce Libimondinoromethine  5 0.0 ug/kg 50 085 85 85 85 85 85 85 85 85 85 85 85 85 8	Ethylbenzene	ND	0.0659		mg/kg dry	0.0597	110%	21 - 165	5	50	10K5219	NTK3149-31	12/01/10 22:15
Sylenes, total   ND   0.186   mg/kg dry   0.199   1049   31-159   5   50   10KS219   NTK3149-31   1201/10   22-15	Naphthalene	ND	0.0504		mg/kg dry	0.0597	84%	10 - 160	8	50	10K5219	NTK3149-31	12/01/10 22:15
Surreguen: 1,2-Dichloroethme-44	Toluene	ND	0.0633		mg/kg dry	0.0597	106%	45 - 145	4	50	10K5219	NTK3149-31	12/01/10 22:15
Surveguet: Dieromofhioromethiane	Xylenes, total	ND	0.186		mg/kg dry	0.179	104%	31 - 159	5	50	10K5219	NTK3149-31	12/01/10 22:15
Sarragane: Tahane-als	Surrogate: 1,2-Dichloroethane-d4		36.7		ug/kg	50.0	73%	67 - 138			10K5219	NTK3149-31	12/01/10 22:15
	Surrogate: Dibromofluoromethane		44.2		ug/kg	50.0	88%	75 - 125			10K5219	NTK3149-31	12/01/10 22:15
Benzene	Surrogate: Toluene-d8		50.2		ug/kg	50.0	100%	76 - 129			10K5219	NTK3149-31	12/01/10 22:15
Benzene   ND   0.0441   mg/kg dry   0.054   878   42 - 14   14   50   10.0802   NTL0373-09   12.03/10   22.25   Ethylbenzene   ND   0.0412   mg/kg dry   0.054   778   21 - 165   20   50   10.0802   NTL0373-09   12.03/10   22.25   12.05   10.0802   NTL0373-09   12.03/10   22.25	Surrogate: 4-Bromofluorobenzene		51.1		ug/kg	50.0	102%	67 - 147			10K5219	NTK3149-31	12/01/10 22:15
Publish   Publ	10L0802-MSD1												
Naphthalene   ND   0.0520   mg/kg dry   0.0534   97%   10-160   10   50   101.0802   NTL0373-09   12.03/10   22.25   Toluene   0.00160   0.0444   mg/kg dry   0.0634   87%   45-145   19   50   101.0802   NTL0373-09   12.03/10   22.25   Nzylenes, total   0.00451   0.131   mg/kg dry   0.160   76%   45-145   19   50   101.0802   NTL0373-09   12.03/10   22.25   Nzylenes, total   0.00451   0.131   mg/kg dry   0.160   100   76-138   100.0802   NTL0373-09   12.03/10   22.25   Nzylenes, total   0.06451   0.134   0.06451   0	Benzene	ND	0.0441		mg/kg dry	0.0534	83%	42 - 141	14	50	10L0802	NTL0373-09	12/03/10 22:25
Toluene 0.00160 0.0444 mg/kg dry 0.053 48% 45-145 19 50 101.0802 NTL0373-09 12.03/10 22:25 Xylenes, total 0.00451 0.131 mg/kg dry 0.160 79% 31-159 18 50 101.0802 NTL0373-09 12.03/10 22:25 Surrogate: 1,2-Dichlorochame-44 54.9 ug/kg 50.0 100% 67-138 5-101.0802 NTL0373-09 12.03/10 22:25 Surrogate: 1-Dichromofluoromethane 50.5 ug/kg 50.0 10% 67-138 5-101.0802 NTL0373-09 12.03/10 22:25 Surrogate: 1-Dichromofluoromethane 4.8 49.4 ug/kg 50.0 99% 67-129 5-101.0802 NTL0373-09 12.03/10 22:25 Surrogate: 1-Dichromofluorobenizene 4.8.9 ug/kg 50.0 99% 67-129 5-101.0802 NTL0373-09 12.03/10 22:25 Surrogate: 4-Bromofluorobenizene 5-101.0802 NTL0373-09 12.	Ethylbenzene	ND	0.0412		mg/kg dry	0.0534	77%	21 - 165	20	50	10L0802	NTL0373-09	12/03/10 22:25
Xylenes, total   0.00451   0.131   mg/kg dry   0.160   79%   31-159   18   50   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 1.2-Dichlaroethme-44   54.9   ug/kg   50.0   101%   67-138   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: Dibromofiluoromethane   50.5   ug/kg   50.0   99%   76-129   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: Toluene-d8   49.4   ug/kg   50.0   98%   67-147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofiluorobenzene   48.9   ug/kg   50.0   98%   67-147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofiluorobenzene   48.9   ug/kg   50.0   98%   67-147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofiluorobenzene   48.9   ug/kg   50.0   98%   67-147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofiluorobenzene   48.9   ug/kg   49.0   47.5   48.9   48	Naphthalene	ND	0.0520		mg/kg dry	0.0534	97%	10 - 160	10	50	10L0802	NTL0373-09	12/03/10 22:25
Surrogaie: 1,2-Dichloroethame-d4 54.9  ug/kg 50.0  101% 75-125 101,0802 NTL0373-09 12/03/10 22:25 Surrogaie: Dibromofluoromethame 50.5  ug/kg 50.0  101% 75-125 101,0802 NTL0373-09 12/03/10 22:25 Surrogaie: Toluene-d8 48.9  ug/kg 50.0  98% 67-147 101,0802 NTL0373-09 12/03/10 22:25 Surrogaie: Toluene-d8 48.9  ug/kg 50.0  98% 67-147 101,0802 NTL0373-09 12/03/10 22:25 Surrogaie: Toluene-d8 ND 1.19  mg/kg dry 1.75 78% 32-120 68 30 101,085670 NTK3173-01 12/01/10 21:00 Anthracene ND 1.30  mg/kg dry 1.75 78% 32-120 10-0807 10-08670 NTK3173-01 12/01/10 21:00 Anthracene ND 1.31  mg/kg dry 1.75 78% 33-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) anthracene ND 1.32  mg/kg dry 1.75 78% 33-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35  mg/kg dry 1.75 78% 33-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35  mg/kg dry 1.75 78% 33-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35  mg/kg dry 1.75 78% 31-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.32  mg/kg dry 1.75 78% 31-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35  mg/kg dry 1.75 78% 31-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.32  mg/kg dry 1.75 78% 31-121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.36  mg/kg dry 1.75 78% 31-121 31 31 31 31 31 31 31 31 31 31 31 31 31	Toluene	0.00160	0.0444		mg/kg dry	0.0534	80%	45 - 145	19	50	10L0802	NTL0373-09	12/03/10 22:25
Surrogate: Dibromofluoromethane   50.5   ug/kg   50.0   101%   75 - 125   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: Toluene-d8   49.4   ug/kg   50.0   99%   76 - 129   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   48.9   ug/kg   50.0   98%   67 - 147   101.0802   NTL0373-09   12/03/10   22:25   Surrogate: 4-Bromofluorobenzene   50.0	Xylenes, total	0.00451	0.131		mg/kg dry	0.160	79%	31 - 159	18	50	10L0802	NTL0373-09	12/03/10 22:25
Surrogate: Toluene-d8	Surrogate: 1,2-Dichloroethane-d4		54.9		ug/kg	50.0	110%	67 - 138			10L0802	NTL0373-09	12/03/10 22:25
Polyaromatic Hydrocarbons by EPA 8270D   Polyaromatic Hydrocarbons by EPA 82	Surrogate: Dibromofluoromethane		50.5		ug/kg	50.0	101%	75 - 125			10L0802	NTL0373-09	12/03/10 22:25
Polyaromatic Hydrocarbons by EPA 8270D  10K5670-MSD1  Acenaphthlene ND 1.19 mg/kg dry 1.75 68% 42-120 9 40 10K5670 NTK3173-01 12/01/10 21:00 Acenaphthylene ND 1.39 mg/kg dry 1.75 72% 32-120 6 30 10K5670 NTK3173-01 12/01/10 21:00 Anthracene ND 1.30 mg/kg dry 1.75 75% 10-200 10 50 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) anthracene ND 1.32 mg/kg dry 1.75 75% 33-121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35 mg/kg dry 1.75 75% 33-121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.21 mg/kg dry 1.75 77% 26-137 3 42 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 21-124 14 32 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.25 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.25 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.36 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.30 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.31 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.33 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.33 mg/kg dry 1.75 78% 37-120 8 32 10K5670 NTK3173-01 12/01/	Surrogate: Toluene-d8		49.4		ug/kg	50.0	99%	76 - 129			10L0802	NTL0373-09	12/03/10 22:25
ND   1.19   mg/kg dry   1.75   68%   42 - 120   9   40   10K5670   NTK3173-01   12/01/10   21:00   Acenaphthylene   ND   1.26   mg/kg dry   1.75   72%   32 - 120   6   30   10K5670   NTK3173-01   12/01/10   21:00   Anthracene   ND   1.39   mg/kg dry   1.75   72%   72%   32 - 120   6   30   10K5670   NTK3173-01   12/01/10   21:00   Anthracene   ND   1.30   mg/kg dry   1.75   74%   41 - 120   11   30   10K5670   NTK3173-01   12/01/10   21:00	Surrogate: 4-Bromofluorobenzene		48.9		ug/kg	50.0	98%	67 - 147			10L0802	NTL0373-09	12/03/10 22:25
Acenaphthene ND 1.19 mg/kg dry 1.75 68% 42 - 120 9 40 10K5670 NTK3173-01 12/01/10 21:00 Acenaphthylene ND 1.26 mg/kg dry 1.75 72% 32 - 120 6 30 10K5670 NTK3173-01 12/01/10 21:00 Anthracene ND 1.39 mg/kg dry 1.75 75% 41 - 120 11 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) anthracene ND 1.30 mg/kg dry 1.75 75% 33 - 121 10 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) pyrene ND 1.32 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.21 mg/kg dry 1.75 75% 26 - 137 3 42 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.25 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.36 mg/kg dry 1.75 76% 28 - 123 9 34 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.36 mg/kg dry 1.75 76% 38 - 123 9 34 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.36 mg/kg dry 1.75 76% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.30 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Ng/kg dry 1.75 78% 38 - 120 7	Polyaromatic Hydrocarbons by I	EPA 8270D											
Accanaphthylene ND 1.26 mg/kg dry 1.75 72% 32 - 120 6 30 10K5670 NTK3173-01 12/01/10 21:00 Anthracene ND 1.39 mg/kg dry 1.75 79% 10 - 200 10 50 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) anthracene ND 1.30 mg/kg dry 1.75 74% 41 - 120 11 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) pyrene ND 1.32 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (g),h,i) perylene ND 1.21 mg/kg dry 1.75 77% 26 - 137 3 42 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Chrysene ND 1.25 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.29 mg/kg dry 1.75 76% 28 - 123 9 34 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.30 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-ed) pyrene ND 1.30 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.36 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.36 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00	10K5670-MSD1												
Anthracene ND 1.39 mg/kg dry 1.75 79% 10 - 200 10 50 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) anthracene ND 1.30 mg/kg dry 1.75 74% 41 - 120 11 30 10K5670 NTK3173-01 12/01/10 21:00 Benzo (a) pyrene ND 1.32 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.21 mg/kg dry 1.75 66% 21 - 124 14 32 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.25 mg/kg dry 1.75 74% 25 - 127 10 31 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.36 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.30 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-ed) pyrene ND 1.27 mg/kg dry 1.75 76% 37 41 41 40 21 39 37 10K5670 NTK3173-01 12/01/10 21:00 NTK3173-01 1	Acenaphthene	ND	1.19		mg/kg dry	1.75	68%	42 - 120	9	40	10K5670	NTK3173-01	12/01/10 21:00
Benzo (a) anthracene ND 1.30 mg/kg dry 1.75 74% 41-120 11 30 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 75% 33-121 10 33 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 75% 33-121 10 33 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 77% 26-137 3 42 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 77% 26-137 3 42 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 28-123 9 34 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 28-123 9 34 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 28-123 9 34 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 41-120 9 37 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 74% 41-120 9 37 10K5670 NTK3173-01 12/01/10 21:00 11deno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 74% 25-123 13 32 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.33 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.10 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10	Acenaphthylene	ND	1.26		mg/kg dry	1.75	72%	32 - 120	6	30	10K5670	NTK3173-01	12/01/10 21:00
Benzo (a) pyrene ND 1.32 mg/kg dry 1.75 75% 33 - 121 10 33 10K5670 NTK3173-01 12/01/10 21:00 Benzo (b) fluoranthene ND 1.35 mg/kg dry 1.75 77% 26 - 137 3 42 10K5670 NTK3173-01 12/01/10 21:00 Benzo (g,h,i) perylene ND 1.21 mg/kg dry 1.75 69% 21 - 124 14 32 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Chrysene ND 1.25 mg/kg dry 1.75 76% 14 - 140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.29 mg/kg dry 1.75 74% 25 - 127 10 31 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluorene ND 1.30 mg/kg dry 1.75 74% 41 - 120 9 37 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 74% 41 - 120 9 37 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.33 mg/kg dry 1.75 66% 25 - 120 13 42 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.36 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.16 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.01 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.01 mg/kg dry 1.75 76% 37 - 120 8 32 10	Anthracene	ND	1.39		mg/kg dry	1.75	79%	10 - 200	10	50	10K5670	NTK3173-01	12/01/10 21:00
Benzo (b) fluoranthene  ND  1.35  mg/kg dry  1.75  77%  26 - 137  3 42  10K5670  NTK3173-01  12/01/10  21:00  Benzo (g,h,i) perylene  ND  1.21  mg/kg dry  1.75  69%  21 - 124  14 32  10K5670  NTK3173-01  12/01/10  21:00  Benzo (k) fluoranthene  ND  1.32  mg/kg dry  1.75  76%  14 - 140  21 39  10K5670  NTK3173-01  12/01/10  21:00  Chrysene  ND  1.25  mg/kg dry  1.75  77%  28 - 123  9 34  10K5670  NTK3173-01  12/01/10  21:00  Dibenz (a,h) anthracene  ND  1.29  mg/kg dry  1.75  77%  28 - 123  9 34  10K5670  NTK3173-01  12/01/10  21:00  Fluoranthene  ND  1.36  mg/kg dry  1.75  78%  38 - 120  7  35  10K5670  NTK3173-01  12/01/10  21:00  Fluoranthene  ND  1.30  mg/kg dry  1.75  78%  38 - 120  7  35  10K5670  NTK3173-01  12/01/10  21:00  Indeno (1,2,3-cd) pyrene  ND  1.27  mg/kg dry  1.75  78%  38 - 120  7  35  10K5670  NTK3173-01  12/01/10  21:00  NTK3173-01  12/01/10  21:00  Phenanthrene  ND  1.30  mg/kg dry  1.75  78%  38 - 120  7  35  10K5670  NTK3173-01  12/01/10  21:00	Benzo (a) anthracene	ND	1.30		mg/kg dry	1.75	74%	41 - 120	11	30	10K5670	NTK3173-01	12/01/10 21:00
Benzo (g,h,i) perylene ND 1.21 mg/kg dry 1.75 69% 21-124 14 32 10K5670 NTK3173-01 12/01/10 21:00 Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Chrysene ND 1.25 mg/kg dry 1.75 71% 28-123 9 34 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.29 mg/kg dry 1.75 74% 25-127 10 31 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluorene ND 1.30 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 73% 25-123 13 32 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.16 mg/kg dry 1.75 66% 25-120 13 42 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) NTK3173-01 12/01/10 21:00 Mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.16 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.16 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.16 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.16 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.16 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.01 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.01 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.01 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.01 mg/kg dry 1.75 76% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) ND 1.01 mg/kg dry 1.75 ND 1.01 Indeno (1,2,3-cd) ND 1.01 Indeno (1,2,3-cd) ND 1.01 Indeno (1,2,3-cd)	Benzo (a) pyrene	ND	1.32		mg/kg dry	1.75	75%	33 - 121	10	33	10K5670	NTK3173-01	12/01/10 21:00
Benzo (k) fluoranthene ND 1.32 mg/kg dry 1.75 76% 14-140 21 39 10K5670 NTK3173-01 12/01/10 21:00 Chrysene ND 1.25 mg/kg dry 1.75 71% 28-123 9 34 10K5670 NTK3173-01 12/01/10 21:00 Dibenz (a,h) anthracene ND 1.29 mg/kg dry 1.75 74% 25-127 10 31 10K5670 NTK3173-01 12/01/10 21:00 Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38-120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluorene ND 1.30 mg/kg dry 1.75 74% 41-120 9 37 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 73% 25-123 13 32 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.33 mg/kg dry 1.75 66% 25-120 13 42 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 1.75 1.75 1.75 1.75 1.75 1	Benzo (b) fluoranthene	ND	1.35		mg/kg dry	1.75	77%	26 - 137	3	42	10K5670	NTK3173-01	12/01/10 21:00
Chrysene         ND         1.25         mg/kg dry         1.75         71%         28 - 123         9         34         10K5670         NTK3173-01         12/01/10         21:00           Dibenz (a,h) anthracene         ND         1.29         mg/kg dry         1.75         74%         25 - 127         10         31         10K5670         NTK3173-01         12/01/10         21:00           Fluoranthene         ND         1.36         mg/kg dry         1.75         78%         38 - 120         7         35         10K5670         NTK3173-01         12/01/10         21:00           Fluorene         ND         1.30         mg/kg dry         1.75         74%         41 - 120         9         37         10K5670         NTK3173-01         12/01/10         21:00           Indeno (1,2,3-ed) pyrene         ND         1.27         mg/kg dry         1.75         73%         25 - 123         13         32         10K5670         NTK3173-01         12/01/10         21:00           Naphthalene         ND         1.16         mg/kg dry         1.75         66%         25 - 120         13         42         10K5670         NTK3173-01         12/01/10         21:00           Pyrene         ND	Benzo (g,h,i) perylene	ND	1.21		mg/kg dry	1.75	69%	21 - 124	14	32	10K5670	NTK3173-01	12/01/10 21:00
Dibenz (a,h) anthracene         ND         1.29         mg/kg dry         1.75         74%         25 - 127         10         31         10K5670         NTK3173-01         12/01/10         21:00           Fluoranthene         ND         1.36         mg/kg dry         1.75         78%         38 - 120         7         35         10K5670         NTK3173-01         12/01/10         21:00           Fluorene         ND         1.30         mg/kg dry         1.75         74%         41 - 120         9         37         10K5670         NTK3173-01         12/01/10         21:00           Indeno (1,2,3-cd) pyrene         ND         1.27         mg/kg dry         1.75         73%         25 - 123         13         32         10K5670         NTK3173-01         12/01/10         21:00           Naphthalene         ND         1.16         mg/kg dry         1.75         66%         25 - 120         13         42         10K5670         NTK3173-01         12/01/10         21:00           Phenanthrene         ND         1.33         mg/kg dry         1.75         76%         37 - 120         8         32         10K5670         NTK3173-01         12/01/10         21:00           Pyrene         ND	Benzo (k) fluoranthene	ND	1.32		mg/kg dry	1.75	76%	14 - 140	21	39	10K5670	NTK3173-01	12/01/10 21:00
Fluoranthene ND 1.36 mg/kg dry 1.75 78% 38 - 120 7 35 10K5670 NTK3173-01 12/01/10 21:00 Fluorene ND 1.30 mg/kg dry 1.75 74% 41 - 120 9 37 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 73% 25 - 123 13 32 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.16 mg/kg dry 1.75 66% 25 - 120 13 42 10K5670 NTK3173-01 12/01/10 21:00 Prenanthrene ND 1.33 mg/kg dry 1.75 76% 37 - 120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 66% 29 - 125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 66% 29 - 125 9 40 10K5670 NTK3173-01 12/01/10 21:00 mg/kg dry 1.75 66% 29 - 125 9 40 10K5670 NTK3173-01 12/01/10 21:00 NTK3173-01 12/01/10 21:00 NTK3173-01 12/01/10 21:00 NTK3173-01 12/01/10 21:00 NTK3173-01 NTK3173-01 12/01/10 21:00 NTK3173-01 NTK3173-01 12/01/10 21:00 NTK3173-01 NTK3	Chrysene	ND	1.25		mg/kg dry	1.75	71%	28 - 123	9	34	10K5670	NTK3173-01	12/01/10 21:00
Fluorene ND 1.30 mg/kg dry 1.75 74% 41-120 9 37 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.27 mg/kg dry 1.75 73% 25-123 13 32 10K5670 NTK3173-01 12/01/10 21:00 Naphthalene ND 1.16 mg/kg dry 1.75 66% 25-120 13 42 10K5670 NTK3173-01 12/01/10 21:00 Phenanthrene ND 1.33 mg/kg dry 1.75 76% 37-120 8 32 10K5670 NTK3173-01 12/01/10 21:00 Pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.16 mg/kg dry 1.75 66% 29-125 9 40 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 57% 19-120 11 45 10K5670 NTK3173-01 12/01/10 21:00 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.75 Indeno (1,2,3-cd) pyrene ND 1.01 mg/kg dry 1.	Dibenz (a,h) anthracene	ND	1.29		mg/kg dry	1.75	74%	25 - 127	10	31	10K5670	NTK3173-01	12/01/10 21:00
Indeno (1,2,3-ed) pyrene         ND         1.27         mg/kg dry         1.75         73%         25 - 123         13         32         10K5670         NTK3173-01         12/01/10         21:00           Naphthalene         ND         1.16         mg/kg dry         1.75         66%         25 - 120         13         42         10K5670         NTK3173-01         12/01/10         21:00           Phenanthrene         ND         1.33         mg/kg dry         1.75         76%         37 - 120         8         32         10K5670         NTK3173-01         12/01/10         21:00           Pyrene         ND         1.16         mg/kg dry         1.75         66%         29 - 125         9         40         10K5670         NTK3173-01         12/01/10         21:00           I-Methylnaphthalene         ND         1.01         mg/kg dry         1.75         57%         19 - 120         11         45         10K5670         NTK3173-01         12/01/10         21:00	Fluoranthene	ND	1.36		mg/kg dry	1.75	78%	38 - 120	7	35	10K5670	NTK3173-01	12/01/10 21:00
Naphthalene         ND         J.16         mg/kg dry         1.75         66%         25 - J20         13         42         10K5670         NTK3173-01         12/01/10         21:00           Phenanthrene         ND         1.33         mg/kg dry         1.75         76%         37 - 120         8         32         10K5670         NTK3173-01         12/01/10         21:00           Pyrene         ND         1.16         mg/kg dry         1.75         66%         29 - 125         9         40         10K5670         NTK3173-01         12/01/10         21:00           1-Methylnaphthalene         ND         1.01         mg/kg dry         1.75         57%         19 - 120         11         45         10K5670         NTK3173-01         12/01/10         21:00	Fluorene	ND	1.30		mg/kg dry	1.75	74%	41 - 120	9	37	10K5670	NTK3173-01	12/01/10 21:00
Phenanthrene         ND         1.33         mg/kg dry         1.75         76%         37 - 120         8         32         10K5670         NTK3173-01         12/01/10         21:00           Pyrene         ND         1.16         mg/kg dry         1.75         66%         29 - 125         9         40         10K5670         NTK3173-01         12/01/10         21:00           1-Methylnaphthalene         ND         1.01         mg/kg dry         1.75         57%         19 - 120         11         45         10K5670         NTK3173-01         12/01/10         21:00	Indeno (1,2,3-cd) pyrene	ND	1.27		mg/kg dry	1.75	73%	25 - 123	13	32	10K5670	NTK3173-01	12/01/10 21:00
Pyrene         ND         1.16         mg/kg dry         1.75         66%         29 - 125         9         40         10K5670         NTK3173-01         12/01/10         21:00           1-Methylnaphthalene         ND         1.01         mg/kg dry         1.75         57%         19 - 120         11         45         10K5670         NTK3173-01         12/01/10         21:00	Naphthalene	ND	1.16		mg/kg dry	1.75	66%	25 - 120	13	42	10K5670	NTK3173-01	12/01/10 21:00
I-Methylnaphthalene ND 1.01 mg/kg dry 1.75 57% 19 - 120 11 45 10K5670 NTK3173-01 12/01/10 21:00	Phenanthrene	ND	1.33		mg/kg dry	1.75	76%	37 - 120	8	32	10K5670	NTK3173-01	12/01/10 21:00
1-Methylnaphthalene ND 1.01 mg/kg dry 1.75 57% 19 - 120 11 45 10K5670 NTK3173-01 12/01/10 21:00	Pyrene	ND	1.16		mg/kg dry	1.75	66%	29 - 125	9	40	10K5670	NTK3173-01	12/01/10 21:00
2-Methylnaphthalene ND 1.10 mg/kg dry 1.75 63% 11 - 120 10 50 10K5670 NTK3173-01 12/01/10 21:00	I-Methylnaphthalene	ND	1.01			1.75	57%	19 - 120	11	45	10K5670	NTK3173-01	12/01/10 21:00
	2-Methylnaphthalene	ND	1.10		mg/kg dry	1.75	63%	11 - 120	10	50	10K5670	NTK3173-01	12/01/10 21:00





10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

# PROJECT QUALITY CONTROL DATA

## Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA	8270D										
10K5670-MSD1											
Surrogate: Terphenyl-d14		1.06		mg/kg dry	1.75	60%	18 - 120		10K5670	NTK3173-01	12/01/10 21:00
Surrogate: 2-Fluorobiphenyl		1.12		mg/kg dry	1.75	64%	14 - 120		10K5670	NTK3173-01	12/01/10 21:00
Surrogate: Nitrobenzene-d5		1.06		mg/kg dry	1.75	61%	17 - 120		10K5670	NTK3173-01	12/01/10 21:00



THE LEADER IN ENVIRONMENTAL TESTING

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

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

10179 Highway 78

Ladson, SC 29456

Attn Tom McElwee

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received: 11/26/10 08:00

## **CERTIFICATION SUMMARY**

#### TestAmerica Nashville

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



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

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

10179 Highway 78

Ladson, SC 29456 Tom McElwee

Attn

ND

Work Order:

NTK3173

Project Name:

Laurel Bay Housing Project

Project Number:

[none]

Received:

11/26/10 08:00

## DATA QUALIFIERS AND DEFINITIONS

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

#### METHOD MODIFICATION NOTES

Te	st/	/m	er	ic	a
- The Andrews Control Co.	or committee description	CONTRACTOR STATE	antonomic S. C. a. a. management	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS	MEDICAL PROPERTY SALES

Nashville Division 2960 Foster Creighton Nashville, TN 37204 Phone: 615-726-0177 Toll Free: 800-765-0980 To assist us in using the proper analytical methods, is this work being conducted for

THE EXPLORER OF CONTROPONDENTAL TESTERS - Nashville, TN 37204 Fax: 615-726-3404 regulatory purposes? Compliance Monitoring? Client Name/Account #: EEG - SBG # 2449 Enforcement Action? Address: 10179 Highway 78 City/State/Zip: Ladson, SC 29456 Site State: SC Project Manager: Tom McElwee email: mcelwee@eeginc.net Telephone Number: 843.412.2097 TA Quote #: Sampler Name: (Print) Project ID: Laurel Bay Housing Project Sampler Signature: Project #: Matrix Analyze For: Preservative BTEX + Napth - 82608 NaOH (Orange Label) No. of Containers Field Filtered Composite Grab Soil Sample ID / Description 'n. Special Instructions: **Laboratory Comments:** Temperature Upon Receipt: VOCs Free of Headspace? Method of Shipment: **FEDEX** Time Received by: Date Received by TestAmerica: Relinquished by 20/10/0800

# ATTACHMENT A



# **NON-HAZARDOUS MANIFEST**

	1. Generator's U	JS EPA	A ID No. Ma	nifest Doc	No.	2. Page 1	of			
	NON-HAZARDOUS MANIFEST						ı			
	3. Generator's Mailing Address:		auntaula Cita Addunas III II	**	41	Δ Manife	est Number	<del></del>		
	MCAS, BEAUFORT	Generator's Site Address (If different than mailing):						0024	6000	
	LAUREL BAY HOUSING					VV	MNA	0031		
	BEAUFORT, SC 29907						B. State	Generator'	s ID	
	4. Generator's Phone 843-228-6461									
	5. Transporter 1 Company Name		6. US EPA ID	Number						
			0. 05 2.77.12	(tuniber		C. State T	ransporter's	ID.		
	EEG, INC.						orter's Phon		879-041	11
	7. Transporter 2 Company Name		8. US EPA ID	Number		1				
						E. State T	ransporter's	ID		
						F. Transp	orter's Phone	2		
	9. Designated Facility Name and Site Address		10. US EPA I	D Number						
	HICKORY HILL LANDFILL					G. State F	acility ID			
	2621 LOW COUNTRY ROAD					H. State F	acility Phone	843-	987-464	13
	RIDGELAND, SC 29936									
				·		<u></u>	T			
G	11. Description of Waste Materials			No.	ntainers Type	13. Total Quantity	14. Unit Wt./Vol.	1.1	Misc. Comme	ents
Ε	a. HEATING OIL TANKS FILLED WITH SAND	····	William Commission (Control of Control of Co		<u> </u>	· · · · ·				
N										
E R	WM Profile # 102655S0	С						<b>—</b>		
A	b.		· · · · · · · · · · · · · · · · · · ·							
Т										
0	WM Profile #									
R	C.									
	. <b></b>									
	WM Profile #									
ŀ	d.								······································	
	NAME DONE SILV. H									
-	WM Profile #  J. Additional Descriptions for Materials Listed Above			K Disnos	l Location		<u> </u>	1		
	,				-,					
				Cell				Level		
ļ				Grid			<del></del>			
	15. Special Handling Instructions and Additional Information	ation	-, c -, 1 ,	1-1	73.2 C	0611	6) 5	770	2-6114	
	COST'S FROM!	Z	78 Cobin	and the			<i>J</i>			
-	) 377 Cobin 3	<u>) 5</u>	16 ColiA	<u> </u>	8841	_ 0E-A				
	Purchase Order #		EMERGENCY CON	TACT / PHO	ONE NO.:					
	16. GENERATOR'S CERTIFICATE:									
	I hereby certify that the above-described materials are n							ave been fu	lly and	
-	accurately described, classified and packaged and are in	prope	Signature "On behalf		rding to app	licable regul	lations.	Month	D	T V===
	Printed Name		Signature On behalf	O)				Month	Day	Year
+	17. Transporter 1 Acknowledgement of Receipt of Mate	rials		<del></del>					<u> </u>	
1	Printed Name		Signature					Month	Day	Year
	Tames Mildurin				NA SERVER			12.	7 7	7.75
	18. Transporter 2 Acknowledgement of Receipt of Mate	rials				1114			<del></del>	
+	Printed Name		Signature					Month	Day	Year
+	AD COURT OF THE PROPERTY OF									L
	19. Certificate of Final Treatment/Disposal	A.L		laa 11 1	and a 2	٠ ، ١				
	I certify, on behalf of the above listed treatment facility, applicable laws, regulations, permits and licenses on the			ige, the abo	ove-aescribe	ea waste wa	is managed i	n compliand	e with all	
$\vdash$	20. Facility Owner or Operator: Certification of receipt of			ered by th	is manifest					
-	Printed Name	. 11011	Signature	C, CG by till			***************************************	Month	Day	Year
	A service of the serv		J.B.I.d.a.c					,		
										L

White-TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold-TRANSPORTER #1 COPY

# Appendix C Laboratory Analytical Report - Groundwater



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

Client: AECOM - Resolution Consultants

Description: BEALB878TW01WG20151130

Laboratory ID: QL02016-004

Matrix: Aqueous

Date Sampled: 11/30/2015 1645 Date Received: 12/02/2015

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

Run 1	Prep Method 5030B	Analytical Method 8260B	Dilution 1	Analysis Date Analyst 12/08/2015 1413 SES	Prep Date	<b>Batch</b> 91584	
				CAC Analytical			

	CAS	Analytical						
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L 1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L 1
Naphthalene	91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L 1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L 1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L 1

Run 1 Q % Recovery	Acceptance Limits
96	75-120
99	70-120
101	85-120
98	85-115
	Q % Recovery 96 99 101

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank J = Estimated result < PQL and ≥ MDL E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Q = Surrogate failure N = Recovery is out of criteria L = LCS/LCSD failure S = MS/MSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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

# Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Laboratory ID: QL02016-004

Description: BEALB878TW01WG20151130

Matrix: Aqueous

Date Sampled: 11/30/2015 1645

Date Received: 12/02/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst Batch **Prep Date** 1 3520C 8270D (SIM) 12/10/2015 1220 DRB1 12/06/2015 1619 91435

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		66	15-139
Fluoranthene-d10		73	23-154

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$ 

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

# Appendix D Regulatory Correspondence





# Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

July 1, 2015

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)

Craig Ehde (via email) Bryan Beck (via email)



## Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:** 

Subject: IGWA Dated 7/1/2015

# Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 2	432 Elderberry
257 Beech Tank 1 257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 2	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 2
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3
	/ CO I Italieu I ullis 2

# Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal



#### Catherine E. Heigel, Director

#### Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015

Laurel Bay Military Housing Area Multiple Properties

Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

Per the Department's request, groundwater samples were collected from the attached referenced addresses. The Department reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

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

If you have any questions, please contact me at <u>petruslb@dhec.sc.gov</u> or 803-898-0294.

Sincerely,

Laurel Petrus

NETS

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

Cc: Russell Berry, EQC Region 8 (via email)

Shawn Dolan, Resolution Consultants (via email) Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015

Specific Property Recommendations

Dated June 8, 2016

# Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Monitoring Well Investigation recommendation (15 addresses)				
130 Banyan Drive	473 Dogwood Drive			
256 Beech Street	747 Blue Bell Lane			
285 Birch Drive	749 Blue Bell Lane			
292 Birch Drive	775 Althea Street			
330 Ash Street	1034 Foxglove Street			
331 Ash Street	1104 Iris Lane			
335 Ash Street	1124 Iris Lane			
342 Ash Street				

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

Attachment to: Petrus to Drawdy
Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015
Specific Property Recommendations
Dated June 8, 2016, Page 2