SUMMARY REPORT
223 BIRCH ROAD (FORMERLY 286 BIRCH ROAD)
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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9324 Virginia Avenue Norfolk, Virginia 23511-3095

Prepared by:



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Contract Number: N62470-14-D-9016

CTO WE52

**JUNE 2021** 



Appendix D

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#### **List of Acronyms**

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

ft feet

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank
VISL vapor intrusion screening level



#### 1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 223 Birch Road (Formerly 286 Birch Road). 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 223 Birch Road (Formerly 286 Birch Road). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 286 Birch Road* (MCAS Beaufort, 2008). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

#### 2.1 UST Removal and Soil Sampling

On July 5, 2007, two 280 gallon heating oil USTs were removed at 223 Birch Road (Formerly 286 Birch Road). Tank 1 was removed from the front landscaped bed area adjacent to the house. Tank 2 was removed from the front yard area adjacent to Tank 1. The former UST locations are indicated in the figures of the UST Assessment Report (Appendix B). The USTs



were 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 depths to the bases of the USTs were 4'9" (Tank 1) and 4'2" (Tank 2) bgs and a single soil sample was collected for each at that depth. An additional soil sample was collected at the side of the excavation for each tank at a depth of 3'4" (Tank 1) and 2'4" (Tank 2). The samples were collected from the fill port side of the former USTs to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base and side of each 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 locations (Tanks 1 and 2) 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 the former UST locations (Tanks 1 and 2) at 223 Birch Road (Formerly 286 Birch Road) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated September 8, 2008, SCDHEC requested an IGWAs be conducted at the former UST locations (Tanks 1 and 2) at 223 Birch Road (Formerly 286 Birch Road) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

#### 2.3 Groundwater Sampling

On July 22, 2008, three temporary monitoring wells were installed at 223 Birch Road (Formerly 286 Birch Road), 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 wells were



placed in the same general location as the former heating oil USTs (Tanks 1 and 2). The former UST locations are indicated in the figures of the UST Assessment Report (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring wells. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary wells were abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).

#### 2.4 Groundwater Analytical Results

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

The groundwater results collected from 223 Birch Road (Formerly 286 Birch Road) 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 USTs 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 223 Birch Road (Formerly 286 Birch Road). This NFA determination was obtained in a letter dated December 19, 2008. SCDHEC's NFA letter is provided in Appendix D.

#### 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2008. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 286 Birch Road, Laurel Bay Military Housing Area, January 2008.

Resolution Consultants, 2008. *Initial Groundwater Investigation of Ground Water at Leaking Heating Oil UST Sites Report for Laurel Bay Military Housing Area, Multiple Properties,* 



- Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, September 2008.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.
- South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

#### **Tables**



# Table 1 Laboratory Analytical Results - Soil 223 Birch Road (Formerly 286 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	(1)	Results Samples Collected 07/05/07							
Constituent	SCDHEC RBSLs (1)	286 Birch Bottom 01	286 Birch Side 02	286 Birch Bottom 03	286 Birch Side 04				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)									
Benzene	0.003	0.00585	0.0107	ND	ND				
Ethylbenzene	1.15	0.190	0.451	0.000387	0.00114				
Naphthalene	0.036	2.200	3.480	0.00273	0.0131				
Toluene	0.627	ND	ND	ND	ND				
Xylenes, Total	13.01	0.154	0.353	0.00036	0.00111				
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)								
Benzo(a)anthracene	0.66	0.249	2.050	0.953	ND				
Benzo(b)fluoranthene	0.66	0.141	1.020	0.409	ND				
Benzo(k)fluoranthene	0.66	0.068	0.542	ND	ND				
Chrysene	0.66	0.253	2.260	0.792	ND				
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND				

#### Notes:

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

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

#### Table 2 Laboratory Analytical Results - Groundwater 223 Birch Road (Formerly 286 Birch Road) Laurel Bay Military Housing Area

#### Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs	Results Samples Collected 07/22/08 and 07/23/08			
constituent	SCOTILC ROSES	(µg/L) <sup>(2)</sup>	A 07/22/08	B 07/22/08	C 07/23/08	
Volatile Organic Compounds Analyze	d by EPA Method 8260B (μ	g/L)				
Benzene	5	16.24	ND	ND	ND	
Ethylbenzene	700	45.95	ND	ND	ND	
Naphthalene	25	29.33	15.7	ND	ND	
Toluene	1000	105,445	ND	ND	ND	
Xylenes, Total	10,000	2,133	ND	ND	ND	
Semivolatile Organic Compounds Ana	alyzed by EPA Method 8270	D (μg/L)				
Benzo(a)anthracene	10	NA	ND	ND	ND	
Benzo(b)fluoranthene	10	NA	ND	ND	ND	
Benzo(k)fluoranthene	10	NA	ND	ND	ND	
Chrysene	10	NA	ND	ND	ND	
Dibenz(a,h)anthracene	10	NA	ND	ND	ND	

#### Notes:

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

 $\mu g/L$  - micrograms per liter

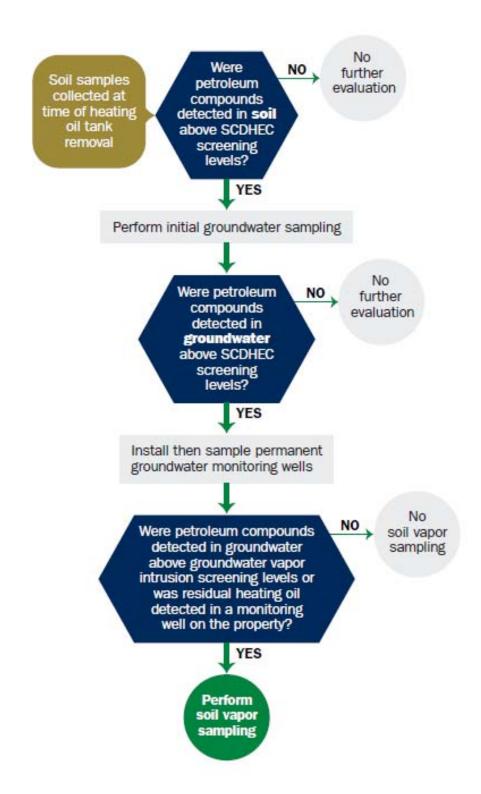
VISL - Vapor Intrusion Screening Level

<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).

<sup>(2)</sup> Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling Bold font indicates the analyte was detected.

## Appendix A Multi-Media Selection Process for LBMH





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

## Appendix B UST Assessment Report



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



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

I. OWNERSHIP		
Beaufort Military Owner Name (Corporation, Individ	en Complex Fam	ucy Housing
Mailing Address	BAY BRID.	
Beau fort	State.	29906 Zip Code
R43 Area Code	, = 1	Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A

Permit I.D. # Actus Lend Lease Construction

Facility Name or Company Site Identifier

286 BIRCH

Street Address or State Road (as applicable)

Beautout, SC 29906

City

Deantout

County

### III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on at Permit ID #
Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES NO (check one)
If you answered YES to the above question, please complete the following information:
My policy provider is: The policy deductible is: The policy limit is:
If you have this type of insurance, please include a copy of the policy with this report.
And
I do/do not (circle one) wish to participate in the Superb Program.
IV. CERTIFICATION (To be signed by the UST owner/operator.)
I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.  Name (Type or print.)
Signature
To be completed by Notary Public:
Sworn before me this day of, 20
(Name)
Notary Public for the state of

•	V. UST FORMATION	<del></del>				_	
		Tank	i Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A	Product(ex. Gas, Kerosene)	#Z DIES	#2 DESEL			-	
B.	_	1280G					
C.	Age						
D.	Construction Material(ex. Steel, FRP)	Steel	STEEL				<del>-</del>
E.	Month/Year of Last Use		Jacob				
F.	Depth (ft.) To Base of Tank	57"	CALL				
G.	Spill Prevention Equipment Y/N	N	50"				
H.	Overfill Prevention Equipment Y/N	N	N				
I. J.	Method of Closure Removed Filled	Remove	REMONED				
	Date Tanks Removed/Filled		ľ				
K.	Visible Corrosion or Pitting Y/N	7.5.07	7.5.07				
<b>L.</b>	Visible Holes Y/N	N	N			-	
<b>M</b> .	Method of disposal for any USTs removed for	N	N				
	Method of disposal for any USTs removed from the		ach dispos	al manif	ests)	- 	
•	Recycling - Scrap Ste	red					
N.	Method of disposal for any liquid petroleum, sludge disposal manifests)	es, or wastew	aters remo	ved fron	n the US	Ts (attacl	<del>-</del>
	Solidification And	14 - B	20ADH	IRST.	LAN	D fi//	· /
	o mon And	Dub	title		LAND	Still	, ——
O. If	f any corrosion, pitting, or holes were observed, des	scribe the loc	ation and e	extent for	each US	ST	
			_				

## VI. PIPING INFORMATION

		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Construction Material. (ex. Steel, FRP)	Steel	0				
В.	Distance from UST to Dispenser	<b> </b>	21FET				
C.	Number of Dispensers	NIA	NA				
D.	Type of System Pressure or Suction	-0-	0				
E.	Was Piping Removed from the Ground? Y/N	Fump	POMP				
F.	Visible Corrosion or Pitting Y/N	4	Y				
G.	Visible Holes Y/N						
H.	Age	N	N				
		N	N				
	If any corrosion, pitting, or holes were observed, described with the served of the se	ipe the	ouna	nd exten	for each	n piping r	un. <u>Lel</u> 11
	VII. BRIEF SITE DESCRIPTION AND H	ПЅТОБ	RY				
-	Home Heating Oil TAN	K -	Res	IDEN	TIAZ	<u>.</u>	<del></del>
-			•				
-					· <u>-</u> ·		
_							<del></del>
					·		<del>-</del>

### VIII. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?  If yes, indicate depth and location on the site map.		*	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?  If yes, indicate location on site map and describe the odor (strong, mild, etc.)		۴	
C. Was water present in the UST excavation, soil borings, or trenches?  If yes, how far below land surface (indicate location and depth)?		۴	
D. Did contaminated soils remain stockpiled on site after closure?  If yes, indicate the stockpile location on the site map.  Name of DHEC representative authorizing soil removal:		*	
Was a petroleum sheen or free product detected on any excavation or boring waters?  If yes, indicate location and thickness.		.*	

SCDHEC Lab Certification Number DW: 84009002

В.	* *						
Sample#	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
						echevard'	A
1 .	BOTTOM	5	CUAR	57"	7.5.67 1440	AMAING	
2	SIDE	5	CLAY	40"		R. Morey	
3.	BUTTON	_ 5	SAND.	50"	18/1510	-	ND
4	SIDE	S	MIX	28"	1520	· · · · · · · · · · · · · · · · · · ·	DN
5						-	
6							
7 .							
. 8							<u>-</u>
9						i ·	
10							
11			<u> </u>				
12						·	-
13							
14							i
15							
16							
17							
18		-					
19							· · · · · · · · · · · · · · · · · · ·
20			·				

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

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

EPA Method 8260 B Volatile ORGANIC Compounds
- PRESERNATIVE ZEA DODIUM BISUPFATE LEA
EPA METHOD 8270 Poly Aromatic Hydro CARBONS
- No Preservative
DNE (1) SIDEWALF And ONE (1) Bottom
DNE (1) SiDEWALL And ONE (1) Bottom  SAmple were secured from tank excavation
Samples were stoned and shipped in AN INSUlated Cooler w/ ICE.
INSUlated cooler w/ ICE.

### XI. RECEPTORS

F-		Yes	No
A	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		
	If yes, indicate type of receptor, distance, and direction on site map.		1 1
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		
	If yes, indicate type of structure, distance, and direction on site map.		/
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?		
	If yes, indicate the type of utility, distance, and direction on the site map.		V
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		/
	If yes, indicate the area of contaminated soil on the site map.		

### SUMMARY OF ANALYSIS RESULTS

NIA

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

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene								
Toluene		· ·			<del> </del>	1		
Ethylbenzene					†			
Xylenes				·	<del>                                     </del>	<del>                                       </del>		
Naphthalene	7				<del> </del>			
Benzo(a)anthracene								
Benzo(b)flouranthene							·	
Benzo(k)flouranthene			<del>                                     </del>				,	
Chrysene								<del></del>
Dibenz(a,h)anthracene								
TPH (EPA 3550)				<u> </u>		<u>.                                    </u>		

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene		,						
Toluene			· <del>-</del> ··					
Ethylbenzene						}		
Xylenes								
Naphthalene			,					
Benzo(a)anthracene								
Benzo(b)flouranthene			-					
Benzo(k)fiouranthene			. •					
Chrysene								<u> </u>
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

## SUMMARY OF ANALYSIS RESULTS (cont'd)

NIA

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.

		o the nearest	U.U1 feet.		
CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5		<del>                                     </del>		<del>-</del>
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000	٠,		<del> </del>	
Total BTEX	N/A				
MTBE	40				<del>                                     </del>
Naphthalene	25				
Benzo(a)anthracene	10		<del> </del>	<del>                                     </del>	
Benzo(b)flouranthene	10		<del> </del>		
Benzo(k)flouranthene	10				
Chrysene	10		<del></del>	<b></b>	
Dibenz(a,h)anthracen	10				:
e 					
EDB	.05			·	
1,2-DCA	.05				
_ead	Site specific				

### ANALYTICAL RESULTS

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

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

## Testamerica ANALYTICAL TESTING CORPORATION

4310 East Anderson Road Orlando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

OQG0164

Project: Project Number: LAUREL BAY

EP2362

Sampled:

07/02/07-07/06/07

Received: 07/10/07

#### LABORATORY REPORT

Sample ID: 288 BIRCH SIDE 04 - Lab Number: OQG0164-08 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Facto	Analyzed	Ву	Method	Batch
Volatile	Organic Compounds by EPA N	Method 8260B - Co						Date/Time		*********	Daten
Surrogase:	1,2-Dichloroethane-d4 (73-137%)	91 %	ul								
	1-Bromofluorobenzene (59-118%)	102 %									
	4-Bromofluorobenzene (59-118%)	101 %									
	Dibromofluoromethane (55-145%)	95 %					1				
	Dibromafluoromethane (55-145%)	98 %									
	Toluene-d8 (70-130%)	99 %									
	Toluene-d8 (70-130%)	100 %				÷					
Polynucie 83-32-9	ear Aromatic Hydrocarbons by	EPA Method 827(	)								
208-96-8	Acenaphthene	21600		ug/kg dry	922	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
120-12-7	Acenaphthylene	1220	ប	ug/kg dry	1220	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
56-55-3	Anthracene	8720		பத/kg dry	663	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
	Benzo (a) anthracene	4010		ug/kg dry	225	2080	10	07/13/07 11:24	REM	EPA 8270C	
205-99-2	Benzo (b) fluoranthene	2570		ug/kg dry	219	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
207-08-9	Benzo (k) fluoranthene	1240	1	ug/kg dry	219	2080	10	07/13/07 11:24	REM	EPA 8170C	7G11007
191-24-2	Benzo (g,h,i) peryiene	598	1	ug/kg dry	216	2080	10	07/13/07 11:24	REM		7G11007
50-32-8	Вепло (2) ругене	1820	I	ug/kg dry	256	2080	10	07/13/07 11:24		EPA 8270C	7G11007
90-12-0	1-Methylnaphthalene	210000		ug/kg dry	10400	20800	100		REM	EPA 8270C	7G11007
218-01-9	Chrysene	4390		ug/kg dry	249	2080		07/13/07 18:19	REM	EPA 8270C	7G11007
53-70-3	Dibenz (a,h) anthracene	273	U	ug/kg dry	273	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
206-44-0	Fluoranthene	7690		ug/kg dry	299	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
86-73-7	Fluorene	. 814	U	ug/kg dry	814		10	07/13/07 11:24	REM	EPA 8270C	<b>7G</b> 11007
193-39-5	Indeno (1,2,3-cd) pyrene	664	ī	ug/kg dry	269	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
91-57-6	2-Methylnaphthalene	352000	•	ug/kg dry	8870	2080		07/13/07 11:24	REM	EPA 8270C	7G11007
91-20-3	Naphthalene	46800		ug/kg dry		20800		07/13/07 18:19	REM	EPA 8270C	7G11007
85-01-8	Phenanthrene	43500		ug∕kg dry	835	2080		07/13/07 11:24	REM	EPA 8270C	7G11007
129-00-0	Pyrene	9150		•	491	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
Surrogate: 2-P	luorobiphenyl (24-121%)	106 %		ug/kg dry	423	2080	10	07/13/07 11:24	REM	EPA 8270C	7G11007
	robenzene-d5 (19-111%)	84 %		٠							
	phenyl-d14 (44-171%)	96 %									
	•	, , , , , , , , , , , , , , , , , , ,									

#### LABORATORY REPORT

Sample ID: 286 BIRCH BOTTOM 01 - Lab Number: OQG0164-09 - Matrix: Solid/Soil

				<del>· · · · · · · · · · · · · · · · · · · </del>		<del>~~~~</del>	~	m. condocin			-
CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
NA	Chemistry Parameters % Solids	83,3		%.	0.100	0.100					
Volatile O	rganic Compounds by EPA !				0.100	0.100	1	07/11/07 16:45	RRP	EPA 160.3	7G11027
100-41-4	Ethylbenzene	5.85 190	RL2,I	ug/kg dry	4.29	11.7	50	07/11/07 23:15	IWT	EPA 8260B	7G12014
<del>1-20-3</del>	Naphthalexe	<del></del>		ug/kg dry <del></del>	4.95 - 6.47	11.7	50	07/11/07 23:15	JWT	EPA 8260B	7G12014
<b>08-88-</b> 3	Toluene	10.1	. ע	=		11.7		<del>-07/11/07-23:15</del>	-TWT-	EPA \$260B	7G12014
330-20-7	Xylenes, total	154	U	ug/kg dry	10.1	11.7	50	07/11/07 23:15	JWT	EPA 8260B	7G12014
urrogate: 1,2	?-Dichloroethane-d4 (73-137%)	83.96		ug/kg dry	6.08	11.7	50	07/11/07 23:15	IWT	EPA 8260B	7G12014

TestAmerica - Orlando, FL

Shali Brown

4310 East Anderson Road Orlando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY Attn;

Work Order:

OQG0164

Project Project Number: LAUREL BAY

EP2362

Sampled:

07/02/07-07/06/07

Received:

07/10/07

#### LABORATORY REPORT

Sample ID: 286 BIRCH BOTTOM 01 - Lab Number: OQG0164-09 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Facto	Analyzed	Ву	Method	D-4.
Volatile	Organic Compounds by EPA N	lethod 8260B - (	ont.		• • • • • • • • • • • • •			Date/Time		Micingo	Batch
	+-Droniojiuorogenzene (39-11896)	106 %									
Summonder	Dibromofluoromethane (55-145%)	94 %						•			
	Toluene-d8 (70-130%)	91 %									
FOIYBUC 83-32-9	lear Aromatic Hydrocarbons by	EPA Method 82	70								
208-96-8	Accomplantaces	145	r	ug/kg dry	88.8	200	1	0000000000000			
120-12-7	Acenaphthylene	117	ប	ug/kg dry	117	200	-	07/13/07 11:47	REM	EPA 8270C	7G11001
56-55-3	Anthracene	148	ľ	ug/kg dry	63.9	200	1	07/13/07 11:47	REM	EPA 8270C	7G11001
	Benzo (a) anthracene	249		ug/kg dry	21.7	200		07/13/07 11:47	REM	EPA 8270C	7G11007
05-99-2	Benzo (b) fluoranthene	141	I	ug/kg dry	21.1		1	07/13/07 11:47	REM	EPA 8270C	7G11007
07-08-9	Benzo (k) fluoranthene	68.0	1	ug/kg dry		200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
91-24-2	Benzo (g,h,i) perylene	28.8	ī	ug/kg dry	21.1	200	. I.	07/13/07 11:47	REM	EPA 8270C	7G11007
0-32-8	Венго (а) ругене	88.0	t		20.8	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
0-12-0	1-Methylnaphthalene	168	I	na/ka qu	24.7	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
18-01-9	Chrysene	253	ı	ug/kg dry	101	200	1	07/13/07 11:47	REM	EPA 8270C	7G110 <b>0</b> 7
3-70-3	Dibenz (a,h) anthracene	26.3		ug/kg dry	24.0	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
) <del>6-44-</del> 0	Fluoranthene	453	U	ug/kg dry	26.3	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
-73-7	Fluorene	78.4		ug/kg dry	28.8	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
3-39-5	Indeno (1,2,3-cd) pyrene	31.6	Ü	ug/kg dry	78.4	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
-57-6	2-Methylnaphthalene		I	ug/kg dry	25.9	200	1	07/13/07 11:47	REM	EPA 8270C	7G11007
-20-3	Naphthalene	216		ug/kg dry	85.4	200		07/13/07 11:47	REM	EPA 8270C	7G11007
-01-8	Phenauthrene	80,5	บ	ug/kg dry	80.5	200		07/13/07 11:47		EPA 8270C	
)-00-0	Pyrene	493		ug/kg dry	47,3	200		07/13/07 11:47		EPA 8270C	7G11007
rogate: 2-F	Tuorobiphenyi (24-121%)	375		ug/kg dry	40.7	200		07/13/07 11:47	_		7G11007
rogate: Niti	robenzene-d5 (19-111%)	74 %					-	11,77	KEM	EPA 8270C	7G11007
	phenyl-d14 (44-17196)	72 %		•							
		92 %						•			

#### LABORATORY REPORT

Sample ID: 286 BIRCH SIDE 02 - Lab Number: OQG0164-10 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed	77	16.1.1	
General (	Chemistry Parameters	************		******		-		Date/Time	В <b>у</b> 	Method	Batch
Volatile O	Prganic Compounds by EPA M	ethod 8260B	الهود المسا	~% · · · · · · · ·	** 0.100	0.100 -	1	07/11/07 16:45	RRP	EPA 160.3	7G11027
100-41-4	Ethylbenzene	10.7 451	RL2.I	ug/kg dry	4.45	12.2	50	07/11/07 23:32	JWT	EPA 8260B	7G12014
91-20-3	Naphthalene	3480		ug/kg dry	5.15	12.2	50	07/11/07 23:32	JWT	EPA 8260B	7G12014
08-88-3	Toluene	10.5		ug/kg dry	6.72	12.2	50	07/11/07 23:32	JWT	EPA 8260B	7G12014
330-2 <b>0</b> -7	Xylenes, total	353	บ	ug/kg dry	10.5	12.2	50	07/11/07 23:32	JWT	EPA 8260B	7G12014
arrogate: 1,2	-Dichloroethane-d4 (73-137%)	85 %		ug/kg dry	6.32	12.2	50	07/11/07 23:32	JWT	EPA 8260B	7G12014
urrogale: 4-E	Bromofluorobenzene (59-118%)	109 %									•
irrogaie: Diè	bromofluoromethane (55-145%)	96 %							<del></del>		
	<i>uene-d8 (70-130%)</i> r Aromatic Hydrocarbons by I	. 96 %						•			

Polynuclear Aromatic Hydrocarbons by EPA Method 8270

TestAmerica - Orlando, FL

Shali Brown

4310 East Anderson Road Orlando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY Attn:

Work Order: Project:

OQG0164

LAUREL BAY

Project Number:

EP2362

Sampled:

07/02/07-07/06/07

Received: 07/10/07

#### LABORATORY REPORT

Sample ID: 286 BIRCH SIDE 02 - Lab Number: OQG0164-10 - Matrix: Solid/Soil

						30107-10-	MINITEL	t: Solid/Soil		•	
CAS #	Analyte	Result	Q	Units	MDI,	PQL	Dil Factor	Analyzed	Ву	36.0.1	
Polynuc	lear Aromatic Hydrocarbons	by EPA Method 827	 A		• • • • • • • • • • • • • • • • • • • •			Date/Time	Бу	Method	Batch
	Acenaphthene	1410	ľ	ug∕kg dry							
208- <del>96-</del> 8	Acenzphthylene	1240	u u		940	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
120-12-7	Authracene	991	_	ug/kg dry	1240	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
56-55-3	Benzo (a) authracene	2050	1	ug/kg dry	677	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
205-99-2	Benzo (b) fluoranthene	1020	I	ug/kg dry	230	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
207-08-9	Benzo (k) fluoranthene		I	ug/kg dry	223	2120	01	07/13/07 12:10	REM	EPA 8270C	
191-24-2	Benzo (g,h,i) perylene	542	Į	ug/kg dry	223	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
50-32-8	Benzo (a) pyrene	220	ប	ug/kg dry	220	2120	10	07/13/07 12:10	REM	EPA 8270C	7G11007
90-12-0	I-Methylnaphthalene	690	1	ug/kg dry	261	2120	10	07/13/07 12:10	REM		7G11007
218-01-9	Chrysene	10300		ug/kg dry	1070	2120	10	07/13/07 12:10		EPA 8270C	7G11007
53-70-3	Dibenz (a,h) anthracene	2260		ug/kg dry	254	2120		07/13/07 12:10	REM	EPA 8270C	7G11007
205-44-0	Fluorenthene	279	ប	ug/kg dry	279	2120		•	REM	EPA 8270C	7G11007
86-73-7	·	3750		ಸರ್ಭಿಕ ಘ್ರ.	205	2120		07/13/07 12:10	REM	EPA 8270C	7G11007
193-39-5	Fluorene	830	υ	ug/kg dry	830	2120		07/13/07 12:10	PEM	EPA \$270C	7011007
91-57-6	Indeno (1,2,3-cd) pyrene	275	U	ug/kg dry	275			07/13/07 12:10	REM	EPA 8270C	7G11007
	2-Methylnaphthalene	18100		ug/kg dry	905	2120		07/13/07 12:10	REM	EPA 8270C	7G11007
91-20-3	Naphthalene	2700				2120		07/13/07 12:10	REM	EPA 8270C	7G11007
85-01-8	Phenanthrene	4480			852	2120	10	07/13/07 12:10	REM	EPA \$270C	7G11007
129-00-0	Ругспе	2880		ug/kg dry	501	2120	10 (	7/13/07 12:10	REM	EPA 8270C	7G11007
Surrogate: 2-F	luorobiphenyl (24-121%)	85 %		ug∕kg dry	431	2120	10 (	7/13/07 12:10	REM	EPA 8270C	7G11007
Surrogate: Nin	robenzene-d5 (19-111%)	88 <del>%</del>									11001
Surrogate: Ter	phenyl-d14 (44-171%)	114%							•		
	•	217 78									

### LABORATORY REPORT

Sample ID: 286 BIRCH BOTTOM 03 - Lab Number: OQG0164-11 - Matrix: Solid/Soil

olatile Orga 43-2	mistry Parameters % Solids mic Compounds by EPA Me	76.6	• • • • • •	······		PQL					
olatile Orga 43-2	% Solids mic Compounds by EPA Mo	76.6			• • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	Factor	Date/Time	Ðу	Method	Batch
- 7	nic Compounds by EPA Me			%.							
- 7		ethod gacop		76.	0.100	0.100	1	07/11/07 16:45	RRP	EPA 160.3	7G11027
3-41-4	Benzene	0.0824									
	Ethylbenzene	0.387	U	ug/kg dry	0.0824	0.225	1	07/11/07 13:29	JWT	EPA 8260B	7G12014
20-3	aphthalese	0.367 ****** 2.73*********		ug/kg dry	0.0952	0.225	1	07/11/07 13:29	JWT	EPA 8260B	7G12014
	oluene		<b>:</b> ·	ுபத∕kġ dry	0.124	0.225	1 .	07/11/07 13:29	JWT	EPA 8260B	
	ylenes, total	0.194	U	ug/kg dry	0.194	0.225	1	07/11/07 13:29	JWT	· · · · · · · · · · · · · · · · · · ·	7G12014
	hloroethane-d4 (73-137%)	0.360		ug/kg dry	0.117	0.225	,	07/11/07 13:29	_	EPA 8260B	7G12014
rocata: 4 Dune	11101 Deiname-04 (/3-137%)	112 %		. *			•	V//11/07 [3:29	TWT	EPA 8260B	7G12014
Ogule, 4-D/0/	ofluorobenzene (59-118%)	100 %			,						
ogale: Dibron	ofluoromethane (55-145%)	103 %								•	
ogate: Toluen	-d8 (70-130%)	98 %									
ynuclear A	romatic Hydrocarbons by E	'DA Mathad Como		•							
<del>29 - A</del>	Cenaphthene	1200						- •			1.1
	enaphthylene		<del>-</del>	ug/kg dry	<del>966</del>	2180	10	07/13/07 12:33	REM	EPA 8270C	7G11007
	ithracene	1270	U	ug/kg dry	1270	2180	10 (	07/13/07 12:33	REM		
• •	nzo (a) anthracene	800	ľ	ug/kg dry	695	2180		07/13/07 12:33		EPA 8270C	7G11007
-	(=) anthracene	953	1	ug/kg dry	236	2180	'	07/13/07 12:33	REM REM	EPA 8270C EPA 8270C	7G11007

Shali Brown

4310 East Anderson Road Orlando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY Attn:

Work Order:

Project Number:

OQG0164

Project:

LAUREL BAY EP2362

Sampled:

07/02/07-07/06/07

Received: 07/10/07

#### LABORATORY REPORT

Sample ID: 286 BIRCH BOTTOM 03 - Lab Number: OQG0164-11 - Matrix: Solid/Soil

		<u> </u>						TE SOUTH SOIL			
CAS#	Алаlyte	Result	Q	Units	MDI.	PQL	Dil Factor	Analyzed	Ву	Method	Devil
Polynuci	ear Aromatic Hydrocarbons h	v FPA Method 91	70 Can					Date/Time		MCHOU	Batch
205-99-2	Benzo (b) fluoranthene	3 D. F. 1916111011 62 409	v - Con				•		<b>*</b> -		•-•
207-08-9	Benzo (k) fluoranthene	229		ug/kg dry	229	2180	10	07/13/07 [2:33	REM	EPA 8270C	7G11007
191-24-2	Benzo (g,h,i) perylene	226	Ų	ug/kg dry	229	2180	10	07/13/07 12:33	REM	EPA 8270C	7G11007
50-32-8	Benzo (a) pyrene		υ	ug/kg dry	226	2180	10	07/13/07 12:33	REM	EPA 8270C	7G11007
90-12-0	1-Methylnaphthalene	270	ī	ug/kg dry	268	2180	10	07/13/07 12:33	· REM	EPA 8270C	7G11007
218-01-9	Chrysene	7090		ug/kg dry	1090	2180	10	07/13/07 12:33	REM	EPA 8270C	7G11007
53-70-3	•	792	1	ug/kg dry	261	2180		07/13/07 12:33	REM	EPA 8270C	
206-44-0	Dibenz (a,h) anthracene	286	U	ug/kg dry	286	2180		07/13/07 12:33	REM		7G11007
86-73-7	Fluoranthene	2240		ug/kg dry	313	2180		07/13/07 12:33		EPA 8270C	7G11007
	Fluorene	853	U	ug/kg dry	853	2180			REM	EPA \$270C	7G11007
193-39-5	Indeno (1,2,3-cd) pyrene	282	υ	ug/kg dry	282			07/13/07 12:33	REM	EPA 8270C	7G11007
91-57-6	2-Methylnaphthalene	11000		ug/kg dry	929	2180		07/13/07 12:33	REM	EPA 8270C	7G11007
91-20-3	Naphthalene	1370	<u>t</u>			2180	10	07/13/07 12:33	REM	EPA 8270C	7G11007
85-01-8	Phenanthrene	3440	<u>.</u>	nā <sub>l</sub> kā ģih	ŖŢĘ	3 į ģĢ	ĬÚ (	7/13/07 12:33	DEM	EPA 8270C	7011007
129-00-0	Pyrene	1780		ug/kg dry	514	2180 ·	10 (	7/13/07 12:33	REM	EPA 8270C	7G11007
Surrogate: 2-1	luorobiphenyl (24-121%)		I	ug/kg dry .	443	2180	10- (	7/13/07 12:33	REM	EPA 8270C	7G11007
	robenzene-d5 (19-11196)	85 %									. 2.1007
	phenyl-d14 (44-171%)	82 %			•					•	•
-0.00. 167	humarata (44-1/1 <b>%</b> )	104 %									

#### LABORATORY REPORT

Sample ID: 286 BIRCH SIDE 04 - Lab Number: OQG0164-12 - Matrix: Solid/Soil

CAS#	Analyte	Result		-			Dil	: Solid/Soli		<del>-</del>	
		Result	Q	Units	MDL	PQL	Factor	Analyzed Date/Time	Ву	Method	Batch
General C	hemistry Parameters			•••••••			• • • • • •				• • - • -
	% Solida	81.4		%.	0.100	0.100	1	07/11/07 16 46			
Volatile ()	rganic Compounds by EPA	Method 8260B				0.100	1	07/11/07 16:45	RRP	EPA 160.3	7G11027
1-13-2	Benzene .	0.0781	U	ug/kg dry	0.0781	0.213					
00-41-4	Ethylbenzene	1.14		ug/kg dry	0.0902		1	07/11/07 13:49	JWT	EPA 8260B	7G12014
1-20-3	Naphthalene	13.1				0.213	1	07/11/07 13:49	JWT	EPA 8260B	7G12014
C-88-80	Toluene	0.184	บ	ug∕kg dry	0.118	0.213	1	07/11/07 13:49	JWT	EPA 8260B	7G12014
330-20-7	Xylenes, total	1.11	U	ug/kg dry	0.184	0.213	1	07/11/07 13:49	JWT	EPA 8260B	7G12014
атоgate: 1,2	-Dichloroethane-d4 (73-137%)			ug/kg dry	0.111	0.213	İ	07/11/07 13:49	JWT	EPA 8260B	7G12014
urrogate: 4-B	romofluorobenzene (50.11994)	115 %			•	1					
arogate: Dib	romofluorobenzene (59-118%) romofluoromeshane (55-145%)		10 may 1 may	eras en artikar.	or Service Const.						
errogate: Tol	uene-d8 (70-130%)	104 %	•						٠.		
		98 %									
-32-9	r Aromatic Hydrocarbons b Accesaphthene		0			,					•
8-96-8	•	90.9	U	ug/kg dry	90.9	205	i	07/13/07 12:56	REM	ED 4 9370.0	~~
0-12-7	Acenaphthylene	120	U	ug/kg dry	120	205		07/13/07 12:56		EPA 8270C	7G11007
-12-7 -55-3	Anthracene	65.4	ซ	ug/kg dry	65,4	205			REM	EPA 8270C	7G11007
-	Benzo (a) anthracene	22.2	<b>u</b> .	ug/kg dry	22.2	205	•	07/13/07 12:56	REM	EPA 8270C	7G11007
5-99-2	Benzo (b) fluoranthene	21.6	U	na∖ka quA	21,6			07/13/07 12:56	REM	EPA 8270C	7G11007
7-08-9	Benzo (k) fluoranthene	21.6	U	ug/kg dry		205		07/13/07 12:56	REM	EPA 8270C	7G11007
-24-2	Benzo (g,h,i) perylene	21.3	ט		21.6	205	1	07/13/07 12:56	REM	EPA 8270C	7G11007
32-8	Вепло (а) ругеце	25.3		ug/kg dry	21.3	205	1	07/13/07 12:56	REM	EPA 8270C	7G11007
			U	ug/kg dry	25,3	205	1	07/13/07 12:56	REM	EPA 8270C	7G11007

TestAmerica - Orlando, FL

Shali Brown

4310 East Anderson Road Ortando, FL 32812 \* 800-851-2560 \* Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY Atm:

Work Order:

OQG0164

Project:

LAUREL BAY

Project Number: EP2362 Sampled:

07/02/07-07/06/07

Received: 07/10/07

#### LABORATORY REPORT

Sample ID: 286 BIRCH SIDE 04 - Lab Number: OQG0164-12 - Matrix: Solid/Soil

-						30104-12	MINITE	x: Solid/Soil			
CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed			
Polynucl 90-12-0	ear Aromatic Hydrocarbons l I-Methylnaphthalene	y EPA Method 82	70 - Con	 L	*	*******		Date/Time	Ву 	Method	Batch
218-01-9	Chrysene	103 24.6	บ	ug/kg dry	103	205	1	07/13/07 12:56	REM	EPA 8270C	7G11007
53-70-3 206-44-0	Dibenz (a,h) anthracene	26.9	u U	ug/kg dry ug/kg dry	24,6 26,9	205	I	07/13/07 12:56	REM	EPA 8270C	7G11007
86-73-7	Fluoranthene Fluorene	29.5	ซ	ug∕kg dry	29.5	205 205	1	07/13/07 12:56 07/13/07 12:56	REM	EPA 8270C	7G11 <b>00</b> 7
193-39-5	Indeno (1,2,3-cd) pyrene	80.3 26.6	<b>U</b>	ug/kg dry	80.3	205	1	07/13/07 12:56	REM REM	EPA 8270C EPA 8270C	7G11007 7G11007
91-57-6 91-20-3	2-Methylnaphthalene	87.5	บ บ	ug/kg dry ug/kg dry	26.6 87.5	205	1	07/13/07 12:56	REM	EPA 8270C	7G11007
85-01-8	Naphthalene Phenanthrene	82.4	υ	ng/kg dry	82.4	205 205	1	07/13/07 12:56 07/13/07 12:56	REM	EPA 8270C	7G11007
129-00-0	Pyrene	48.4 41.7	<b>U</b>	ug/kg dry	48.4	205	1	07/13/07 12:56	REM REM	EPA 8270C EPA 8270C	7G11007 7G11007
Surrogate: 2-1	Fluorobiphenyl (24-121%)	63 %	U	ug/kg dry	41.7	205	. 1	07/13/07 12:56	REM	EPA 8270C	7G11007
Surrogate: Nit Surrogate: Ter	trobenzene-d5 (19-111%) rphenyl-d14 (44-171%)	61 %									
	· ···>· · [177/1/76)	93 %								2	

#### LABORATORY REPORT

Sample ID: 282 BIRCH BOTTOM 01 - Lab Number: OQG0164-13 - Matrix: Solid/Soil

						OQG0104-	19 - M	atrix: Solid/Soil	l		
CAS#	Analyte	Result	Q	Units	MDL	PQL	Di Fact	Analyzed	Ву	Method	
General NA	Chemistry Parameters % Solids		••		••••••			Date/Time		Method	Batch
		75.8		%.	0.100	0.100		•			
71-43-2	Organic Compounds by EPA	Method 8260B			V-100	0.100	1	07/11/07 16:45	RRP	EPA 160.3	7G11027
100-41-4	Ethylbenzene	0,0954	บ	ug/kg dry	0.0954	0.261	1	07/11/07 11/05			
91-20-3	Naphthalene	0.146	1	ug/kg dry	0.110	0.261	1	07/11/07 14:05 07/11/07 14:05	1M.L	EPA 8260B	7G12014
108-88-3	Toluene	0.808		ug∕kg dry	0.144	0.261	1	07/11/07 14:05	TWT.	EPA 8260B	7G12014
1330-20-7	Xylenes, total	0.225	U	ug∕kg dry	0.225	0.261	1	07/11/07 14:05	JWT	EPA 8260B	7G12014
	,2-Dichloroethane-d4 (73-137%)	0.354		ug∕kg dry	0.135	0.261	1	07/11/07 14:05	JWT	EPA 8260B	7G12014
Surrogate: 4	-Bromofluorobenzene (59-118%)	113 %						07/11/07 14:05	JWT	EPA 8260B	7G12014
Surrogate: D	ribromofluoromethane (55-145%)	102 %								•	
Surrogate: To	oluene-d8 (70-130%)	105 %			•						
Polynucie	ar Aromatic Hydrocarbons by	97%						7			
83-32-9	Accuaphthene	FPA Method 827								•	-
208-96-8	Acenephthylene	97.7	U V	ug/kg dry	97.7	220	1	07/13/07 13:18	REM	EPA 8270C	50
120-12-7	Authracene	129 70.3	Ū	ug/kg dry	129	220	. 1	07/13/07 13:18	REM	EPA 8270C	7G11007
56-55-3	Benzo (a) authracene	70.3 28.2	U	ug/kg dry	70.3	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
205-99-2	Benzo (b) fluoranthene		I	ug/kg dry	23.9	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
207-08-9	Benzo (k) fluoranthene	23.2	U	ug/kg dry	23.2	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
191-24-2	Benzo (g,h,i) perylene	23.2	U	ug/kg dry	23.2	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
50-32-8	Вепло (а) рутеле	22.9 27.1	U	ug/kg dry	22.9	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
0-12-0	I-Methylnaphthalene	27.1 111	U	ug/kg dry	<b>2</b> 7.1	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
18-01-9	Chrysene .	26.4	U	ug/kg dry	111	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007 7G11007
3-70-3	Dibenz (a,h) anthracene	28.9	ט	ug/kg dry	26.4	220	1	07/13/07 13:18	REM	EPA 8270C .	7G11007 7G11007
06-44-0	Fluoranthene	40.5	U	цg∕kg dry	28.9	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
	•	40.5	I	ug/kg dry	31.7	220	1	07/13/07 13:18	REM	EPA 8270C	7G11007
	•	2									(Q1100)

TestAmerica - Orlando, FL

Shali Brown

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

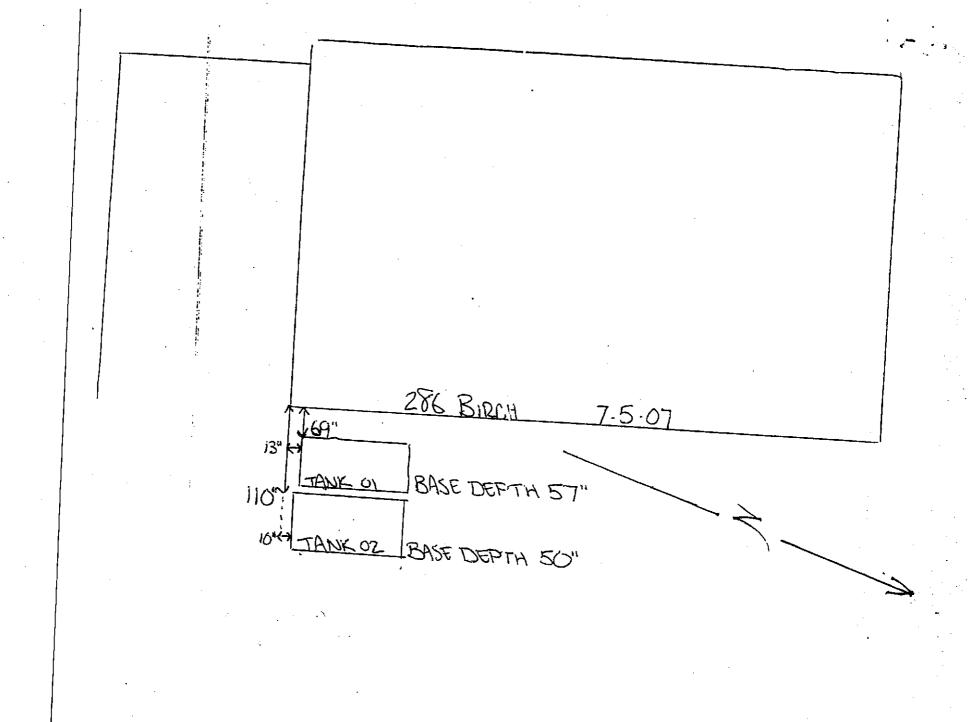
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## Testamerica ANALYTICAL TESTING CORPORATION

To assist us in using the proper analytical metric is this work being conducted for regulatory purpose Compliance Monitoring

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A B TANK I BASE 57"

C D TANK 2 BASE 50"

### BIRCH DRIVE

### TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 46" B-SOIL TEST BOTTOM SAMPLE @ 57"

## TANK 2 EXCAVATION

C-SOIL TEST SIDE SAMPLE @ 60'' D-SOIL TEST BOTTOM SAMPLE @ 50''

CUSTOMER:

BEAUFORT MILITARY COMPLEX FAMILY HOUSING

SITE ADDRESS :

286 BIRCH DRIVE

SCALE:

1/16"=1"-0"
SUPPLIER:

EPG INC.

EPG INC. DATE: 9/27/2007 EPG INC.

P.O. BOX 1096 MOUNT PLEASANT, SC 29465-1096

## Appendix C Laboratory Analytical Report - Groundwater



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

#### **ANALYTICAL RESULTS**

Project: LAUREL BAY MILITARY HOUSING

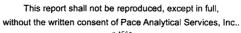
Pace Project No.: 9224083

Sample: 280 BIRCH A	Lab ID: 9224083	002 Collected:	07/22/	08 10:00	Received: 0	7/24/08 12:45	Matrix: Water	
Parameters	Results	Units Repo	rt Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM SPE	Analytical Method:	EPA 8270 by SIM	Preparat	tion Meth	od: EPA 3535			
Benzo(g,h,i)perylene	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:29	9 191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:29	9 207-08-9	
Chrysene	ND ug/L		0.10	1	07/28/08 00:00	07/30/08 03:29	9 218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:29	9 53-70-3	
Fluoranthene	ND ug/L		0.30	1	07/28/08 00:00	07/30/08 03:29	9 206-44-0	
Fluorene	ND ug/L		0.31	1	07/28/08 00:00	07/30/08 03:29	9 86-73-7	
ndeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:29	9 193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	07/28/08 00:00	07/30/08 03:29	9 90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	07/28/08 00:00	07/30/08 03:29	9 91-57-6	
Naphthalene	ND ug/L		1.5	1	07/28/08 00:00	07/30/08 03:29	9 91-20-3	
Phenanthrene	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:29	9 85-01-8	
Pyrene	ND ug/L		0.10	1	07/28/08 00:00	07/30/08 03:29	9 129-00-0	
Nitrobenzene-d5 (S)	42 %		50-150	1		07/30/08 03:29		1g
2-Fluorobiphenyl (S)	57 %		50-150	1		07/30/08 03:29		. 3
Terphenyl-d14 (S)	71 %		50-150	1		07/30/08 03:29		
3260 MSV Low Level	Analytical Method:	EPA 8260						
Benzene	ND ug/L		1.0	1		07/29/08 13:29	9 71-43-2	
Ethylbenzene	ND ug/L		1.0	1		07/29/08 13:29		
Naphthalene	ND ug/L		1.0	1		07/29/08 13:29		
Toluene	ND ug/L		1.0	1		07/29/08 13:29		
n&p-Xylene	ND ug/L		2.0	1		07/29/08 13:29		
o-Xylene	ND ug/L		1.0	1		07/29/08 13:29		
I-Bromofluorobenzene (S)	98 %		87-109	1		07/29/08 13:29		
Dibromofluoromethane (S)	102 %		85-115	1		07/29/08 13:29		
1,2-Dichloroethane-d4 (S)	103 %		79-120	1		07/29/08 13:29		
Toluene-d8 (S)	102 %		70-120	1		07/29/08 13:29		
Sample: 286 BIRCH A	Lab ID: 9224083	003 Collected:	07/22/0	09 11:15	Received: 0	7/24/08 12:45	Matrix: Water	
-								0
Parameters	Results	Jnits Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM SPE	Analytical Method:	EPA 8270 by SIM 1	Preparat	ion Meth	od: EPA 3535			
Acenaphthene	ND ug/L		2.0	1		07/30/08 03:56		
Acenaphthylene	ND ug/L		1.5	1		07/30/08 03:56		
Anthracene	ND ug/L		0.050	1		07/30/08 03:56		
Benzo(a)anthracene	ND ug/L		0.10	1		07/30/08 03:56		
Benzo(a)pyrene	ND ug/L		0.20	1		07/30/08 03:56		
Benzo(b)fluoranthene	ND ug/L		0.30	1		07/30/08 03:56		
Benzo(g,h,i)perylene	ND ug/L		0.20	1		07/30/08 03:56		
Benzo(k)fluoranthene	ND ug/L		0.20	1		07/30/08 03:56		
Chrysene	ND ug/L		0.10	1		07/30/08 03:56		
Dibenz(a,h)anthracene	ND ug/L		0.20	1		07/30/08 03:56		
Fluoranthene	ND ug/L		0.30	1		07/30/08 03:56		
luorene	ND ug/L		0.31	1	07/28/08 00:00	07/30/08 03:56	96 72 7	

Date: 07/30/2008 03:09 PM

**REPORT OF LABORATORY ANALYSIS** 

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Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804

(828)254-7176

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

#### **ANALYTICAL RESULTS**

Project:

LAUREL BAY MILITARY HOUSING

Pace Project No.:

9224083

Parameters  8270 MSSV PAH by SIM SPE Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene	Results  Analytical Method  ND ug/L	Units d: EPA 827	Report Limit 70 by SIM Preparat	DF ion Meth	Prepared	Analyzed	CAS No.	Qual
Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene		d: EPA 827	70 by SIM Preparat	ion Meth	nod: EPA 3535			
1-Methylnaphthalene	ND ug/l				10d. LI A 0000			
· ·	ND ug/L		0.20	1	07/28/08 00:00	07/30/08 03:56	193-39-5	
	<b>5.9</b> ug/L		2.0	1	07/28/08 00:00	07/30/08 03:56	90-12-0	
2-Methylnaphthalene	3.0 ug/L		2.0	1	07/28/08 00:00	07/30/08 03:56	91-57-6	
Naphthalene	8.6 ug/L		1.5	1		07/30/08 03:56		
Phenanthrene	ND ug/L		0.20	1		07/30/08 03:56		
Pyrene	ND ug/L		0.10	1		07/30/08 03:56		
Nitrobenzene-d5 (S)	53 %		50-150	1		07/30/08 03:56		
2-Fluorobiphenyl (S)	83 %		50-150	1		07/30/08 03:56		
Terphenyl-d14 (S)	81 %		50-150	1		07/30/08 03:56		
8260 MSV Low Level	Analytical Method	d: EPA 826	60					
Benzene	ND ug/L		1.0	1		07/29/08 13:52	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		07/29/08 13:52		
Naphthalene	15.7 ug/L		1.0	1		07/29/08 13:52		
Toluene	ND ug/L		1.0	1		07/29/08 13:52		
m&p-Xylene	ND ug/L		2.0	1		07/29/08 13:52		
o-Xylene	ND ug/L		1.0	1		07/29/08 13:52		
4-Bromofluorobenzene (S)	96 %		87-109	1		07/29/08 13:52		
Dibromofluoromethane (S)	101 %		85-115	1		07/29/08 13:52		
1,2-Dichloroethane-d4 (S)	106 %		79-120	1				
Toluene-d8 (S)	99 %		70-120	1		07/29/08 13:52 07/29/08 13:52		
Sample: 286 BIRCH B	Lab ID: 922408	33004	Collected: 07/22/0	8 11:45	Received: 07	/24/08 12:45 N	atrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical Method	: EPA 827	0 by SIM Preparati	on Meth	od: EPA 3535			
Acenaphthene	ND ug/L		2.0	1	07/28/08 00:00	07/30/08 04:23	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	07/28/08 00:00	07/30/08 04:23	208-96-8	
Anthracene	ND ug/L		0.050	1	07/28/08 00:00	07/30/08 04:23	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	07/28/08 00:00	07/30/08 04:23	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1		07/30/08 04:23		
Benzo(b)fluoranthene	ND ug/L		0.30	1		07/30/08 04:23		
Benzo(g,h,i)perylene	ND ug/L		0.20	1		07/30/08 04:23		
Benzo(k)fluoranthene	ND ug/L		0.20	1		07/30/08 04:23		
Chrysene	ND ug/L		0.10	1		07/30/08 04:23		
Dibenz(a,h)anthracene	ND ug/L		0.20	1		07/30/08 04:23		
Fluoranthene	ND ug/L		0.30	1	07/28/08 00:00			
	ND ug/L		0.31	1	07/28/08 00:00			
Fluorene					07/28/08 00:00			
	•		0.20		UTIZONIO UUTUU	U773U/U8 U4123	19.559-5	
ndeno(1,2,3-cd)pyrene	ND ug/L		0.20 2.0	1 1				
ndeno(1,2,3-cd)pyrene 1-Methylnaphthalene	ND ug/L ND ug/L		2.0	1	07/28/08 00:00	07/30/08 04:23	90-12-0	
ndeno(1,2,3-cd)pyrene 1-Methylnaphthalene 2-Methylnaphthalene	ND ug/L ND ug/L ND ug/L		2.0 2.0	1 1	07/28/08 00:00 07/28/08 00:00	07/30/08 04:23 07/30/08 04:23	90-12-0 91-57-6	
Fluorene Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene Phenanthrene	ND ug/L ND ug/L		2.0	1 1 1	07/28/08 00:00	07/30/08 04:23 07/30/08 04:23 07/30/08 04:23	90-12-0 91-57-6 91-20-3	

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#### **REPORT OF LABORATORY ANALYSIS**





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

#### **ANALYTICAL RESULTS**

Project:

LAUREL BAY MILITARY HOUSING

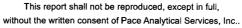
Pace Project No.: 9224083

Sample: 286 BIRCH B	Lab ID: 9	224083004	Collected: 07/22/0	08 11:45	Received: 07	7/24/08 12:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM SPE	Analytical M	ethod: EPA 8	270 by SIM Preparat	ion Meth	nod: EPA 3535			
Nitrobenzene-d5 (S)	61	%	50-150	1	07/28/08 00:00	07/30/08 04:2	3 4165-60-0	
2-Fluorobiphenyl (S)	74	%	50-150	1	07/28/08 00:00	07/30/08 04:2	3 321-60-8	
Terphenyl-d14 (S)	80	%	50-150	1	07/28/08 00:00	07/30/08 04:2	3 1718-51-0	
8260 MSV Low Level	Analytical M	ethod: EPA 8	260					
Benzene	ND	ug/L	1.0	1		07/29/08 14:10	6 71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/29/08 14:10	6 100-41-4	
Naphthalene	ND	ug/L	1.0	1		07/29/08 14:10	6 91-20-3	
Toluene	ND	ug/L	1.0	1		07/29/08 14:10	6 108-88-3	
m&p-Xylene	ND	ug/L	2.0	1		07/29/08 14:10	6 1330-20-7	
o-Xylene	ND	-	1.0	1		07/29/08 14:10		
4-Bromofluorobenzene (S)	95	•	87-109	1		07/29/08 14:10		
Dibromofluoromethane (S)	102		85-115	1		07/29/08 14:10		
1,2-Dichloroethane-d4 (S)	104	%	79-120	1		07/29/08 14:10		
Toluene-d8 (S)	101		70-120	1		07/29/08 14:10		
Sample: 288 BIRCH A	Lab ID: 92	224083005	Collected: 07/22/0	8 14:05	Received: 07	//24/08 12:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM SPE	Analytical Mo	ethod: EPA 82	270 by SIM Preparati	ion Meth	nod: EPA 3535			
Acenaphthene	ND (	ug/L	2.0	1	07/28/08 00:00	07/30/08 04:5	1 83-32-9	
Acenaphthylene	ND (	ug/L	1.5	1	07/28/08 00:00	07/30/08 04:5	1 208-96-8	
Anthracene	ND (	ug/L	0.050	1	07/28/08 00:00	07/30/08 04:5	1 120-12-7	
Benzo(a)anthracene	ND (	ug/L	0.10	1	07/28/08 00:00	07/30/08 04:5	1 56-55-3	
Benzo(a)pyrene	ND i	ıg/L	0.20	1	07/28/08 00:00	07/30/08 04:5	1 50-32-8	
Benzo(b)fluoranthene	ND t	ug/L	0.30	1	07/28/08 00:00	07/30/08 04:51	1 205-99-2	
Benzo(g,h,i)perylene	ND (	ıg/L	0.20	1	07/28/08 00:00	07/30/08 04:5	1 191-24-2	
Benzo(k)fluoranthene	ND (	ıg/L	0.20	1	07/28/08 00:00	07/30/08 04:51	1 207-08-9	
Chrysene	ND (	ıg/L	0.10	1	07/28/08 00:00	07/30/08 04:51	1 218-01-9	
Dibenz(a,h)anthracene	ND i	ıg/L	0.20	1	07/28/08 00:00	07/30/08 04:51	53-70-3	
Fluoranthene	ND (	ıg/L	0.30	1	07/28/08 00:00	07/30/08 04:51	1 206-44-0	
Fluorene	ND t	ıg/L	0.31	1	07/28/08 00:00	07/30/08 04:51	1 86-73-7	
Indeno(1,2,3-cd)pyrene	ND t	-	0.20	1	07/28/08 00:00			
1-Methylnaphthalene	ND i	_	2.0	1	07/28/08 00:00			
2-Methylnaphthalene	ND (	_	2.0	1	07/28/08 00:00			
Naphthalene	ND (		1.5	1	07/28/08 00:00			
Phenanthrene	ND i	-	0.20	1	07/28/08 00:00			
Pyrene	ND (	-	0.10	1	07/28/08 00:00			
Nitrobenzene-d5 (S)	28 9	_	50-150	1	07/28/08 00:00			1g
2-Fluorobiphenyl (S)	52		50-150	1	07/28/08 00:00			.9
Terphenyl-d14 (S)	50		50-150	1	07/28/08 00:00			
8260 MSV Low Level	Analytical Me	ethod: EPA 82	260					
Benzene	ND t	ıa/L	1.0	1		07/29/08 14:40	71-43-2	
		<b>-</b>		•			· · · · • •	

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#### **REPORT OF LABORATORY ANALYSIS**

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

#### **ANALYTICAL RESULTS**

Project:

LAUREL BAY SAMPLING 7/23/08

Pace Project No.:

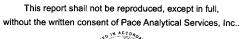
9224209

Sample: 288 BIRCH C	Lab ID: 92242	09009	Collected: 07/23/0	8 08:50	Received: 07	7/25/08 14:30	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8270 MSSV PAH by SIM SPE	Analytical Method	d: EPA 8	270 by SIM Preparati	ion Meth	od: EPA 3535			
Benzo(g,h,i)perylene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 19:08	3 191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 19:08	3 207-08-9	
Chrysene	ND ug/L		0.10	1	07/29/08 00:00	07/30/08 19:08	3 218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	07/29/08 00:00	07/30/08 19:08	3 53-70-3	
Fluoranthene	ND ug/L		0.30	1	07/29/08 00:00	07/30/08 19:08	3 206-44-0	
Fluorene	ND ug/L		0.31	1	07/29/08 00:00	07/30/08 19:08	86-73-7	
ndeno(1,2,3-cd)pyrene	ND ug/L		0.20	1		07/30/08 19:08		
1-Methylnaphthalene	ND ug/L		2.0	1		07/30/08 19:08		
2-Methylnaphthalene	ND ug/L		2.0	1	07/29/08 00:00	07/30/08 19:08	91-57-6	
Naphthalene	ND ug/L		1.5	1		07/30/08 19:08		
Phenanthrene	ND ug/L		0.20	1		07/30/08 19:08		
Pyrene	ND ug/L		0.10	1		07/30/08 19:08		
Nitrobenzene-d5 (S)	52 %		50-150	1		07/30/08 19:08		
2-Fluorobiphenyl (S)	53 %		50-150	1		07/30/08 19:08		
Terphenyl-d14 (S)	60 %		50-150	1		07/30/08 19:08		
3260 MSV Low Level	Analytical Method	I: EPA 82	260					
Benzene	ND ug/L		1.0	1		07/29/08 20:15	71 /2 2	
Ethylbenzene	ND ug/L		1.0	1		07/29/08 20:15		
Naphthalene	ND ug/L		1.0	1		07/29/08 20:15		
oluene	ND ug/L		1.0	1		07/29/08 20:15		
n&p-Xylene	ND ug/L		2.0	1		07/29/08 20:15		
-Xylene	ND ug/L		1.0	1				
l-Bromofluorobenzene (S)	95 %		87-109	1		07/29/08 20:15		
Dibromofluoromethane (S)	103 %		85-115	1		07/29/08 20:15		
,2-Dichloroethane-d4 (S)	106 %		79-120	1		07/29/08 20:15		
Toluene-d8 (S)	101 %		79-120 70-120	1		07/29/08 20:15 07/29/08 20:15		
						37,23,00 23,73	200, 200	
Sample: 286 BIRCH C	Lab ID: 922420	9010	Collected: 07/23/0	8 09:30	Received: 07	/25/08 14:30 M	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
270 MSSV PAH by SIM SPE	Analytical Method	: EPA 82	70 by SIM Preparation	on Meth	od: EPA 3535	•		
cenaphthene	ND ug/L		2.0	1	07/29/08 00:00	07/30/08 19:37	83-32-9	
cenaphthylene	ND ug/L		1.5	1	07/29/08 00:00			
Anthracene	ND ug/L		0.050	1	07/29/08 00:00			
Benzo(a)anthracene	ND ug/L		0.10	1	07/29/08 00:00			
Benzo(a)pyrene	ND ug/L		0.20	1	07/29/08 00:00			
senzo(b)fluoranthene	ND ug/L		0.30		07/29/08 00:00			
enzo(g,h,i)perylene	ND ug/L		0.20		07/29/08 00:00			
enzo(k)fluoranthene	ND ug/L		0.20		07/29/08 00:00			
Chrysene	ND ug/L		0.10	1	07/29/08 00:00			
Pibenz(a,h)anthracene	ND ug/L		0.20		07/29/08 00:00			
luoranthene	ND ug/L		0.30		07/29/08 00:00			
						200.00		

Date: 08/04/2008 10:46 AM

**REPORT OF LABORATORY ANALYSIS** 

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

#### **ANALYTICAL RESULTS**

Project:

LAUREL BAY SAMPLING 7/23/08

Pace Project No.:

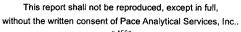
9224209

Sample: 286 BIRCH C	Lab ID:	9224209010	Collected:	07/23/0	08 09:30	Received: 07	7/25/08 14:30 N	/latrix: Water	
Parameters	Results	Units	Report	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical	Method: EPA 82	270 by SIM F	Preparat	ion Meth	od: EPA 3535			
Indeno(1,2,3-cd)pyrene	NE	ug/L		0.20	1	07/29/08 00:00	07/30/08 19:37	193-39-5	
1-Methylnaphthalene	NE	ug/L		2.0	1	07/29/08 00:00	07/30/08 19:37	90-12-0	
2-Methylnaphthalene	NE	ug/L		2.0	1	07/29/08 00:00	07/30/08 19:37	91-57-6	
Naphthalene	NE	ug/L		1.5	1	07/29/08 00:00	07/30/08 19:37	91-20-3	
Phenanthrene		ug/L		0.20	1		07/30/08 19:37		
Pyrene		ug/L		0.10	1		07/30/08 19:37		
Nitrobenzene-d5 (S)		5 %	ę	50-150	1		07/30/08 19:37		
2-Fluorobiphenyl (S)		%		50-150	1		07/30/08 19:37		
Terphenyl-d14 (S)		2 %		50-150	1		07/30/08 19:37		
8260 MSV Low Level	Analytical l	Method: EPA 82	260						•
Benzene	NE	ug/L		1.0	1		07/29/08 20:39	71-43-2	
Ethylbenzene	NE	ug/L		1.0	1		07/29/08 20:39	100-41-4	
Naphthalene	NE	ug/L		1.0	1		07/29/08 20:39	91-20-3	
Toluene	NE	ug/L		1.0	1		07/29/08 20:39	108-88-3	
m&p-Xylene	NE	ug/L		2.0	1		07/29/08 20:39	1330-20-7	
o-Xylene	NE	ug/L		1.0	1		07/29/08 20:39		
4-Bromofluorobenzene (S)	94	. %	8	37-109	1		07/29/08 20:39		
Dibromofluoromethane (S)		i %	8	35-115	1		07/29/08 20:39		
1,2-Dichloroethane-d4 (S)	106	· %		9-120	1		07/29/08 20:39		
Toluene-d8 (S)	100			0-120	1		07/29/08 20:39		
Sample: 259 BEECH C	Lab ID:	9224209011	Collected:	07/23/0	08 09:55	Received: 07	/25/08 14:30 M	1atrix: Water	
Sample: 259 BEECH C Parameters	Lab ID:	9224209011 Units	Collected:		08 09:55 DF	Received: 07	/25/08 14:30 M Analyzed	flatrix: Water	Qual
	Results		Report	Limit	DF	Prepared			Qual
Parameters	Results Analytical I	Units	Report	Limit	DF	Prepared od: EPA 3535		CAS No.	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene	Results  Analytical I	Units Method: EPA 82	Report	Limit 	DF ion Meth	Prepared od: EPA 3535 07/29/08 00:00	Analyzed	CAS No. 83-32-9	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene	Results  Analytical ND ND	Units Method: EPA 82	Report	Limit Preparati 2.0	DF ion Meth	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00	Analyzed 07/30/08 20:05	CAS No. 83-32-9 208-96-8	Qua
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene	Results  Analytical I  ND  ND	Units Method: EPA 82 ug/L ug/L	Report	Preparation 2.0 1.5	DF ion Meth 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed 07/30/08 20:05 07/30/08 20:05	CAS No. 83-32-9 208-96-8 120-12-7	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene	Results  Analytical I  ND  ND  ND	Units  Method: EPA 82  ug/L  ug/L  ug/L	Report	2.0 1.5 0.050	DF ion Meth 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No. 83-32-9 208-96-8 120-12-7 56-55-3	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene  Acenaphthylene	Analytical ND	Units  Method: EPA 82  ug/L  ug/L  ug/L  ug/L	Report	2.0 1.5 0.050 0.10	DF ion Meth 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene	Analytical ND	Units  Method: EPA 82  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L	Report	2.0 1.5 0.050 0.10 0.20	DF ion Meth 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene	Results  Analytical I  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Units  Method: EPA 82  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30	DF ion Meth 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene	Results  Analytical I  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20	DF  ion Meth  1  1  1  1  1  1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene	Results  Analytical I  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Units  Method: EPA 82  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20	DF  1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3	Qual
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20 0.30	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0	Qua
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20 0.30 0.20 0.30 0.30	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7	Qua
Parameters  3270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.10 0.20 0.30 0.20 0.30 0.30 0.31	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5	Qua
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20 0.30 0.20 0.30 0.20 0.30 0.20 0.30	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 90-12-0	Qua
Parameters  3270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene I-Methylnaphthalene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L   Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20 0.30 0.20 0.30 0.20 0.30 0.20 0.30 0.20	DF  ion Meth  1  1  1  1  1  1  1  1  1  1  1  1  1	Prepared od: EPA 3535 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	CAS No.  83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 90-12-0 91-57-6	Qua	
Parameters  8270 MSSV PAH by SIM SPE  Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene	Results  Analytical II  ND  ND  ND  ND  ND  ND  ND  ND  ND	Units  Method: EPA 82  ug/L	Report	2.0 1.5 0.050 0.10 0.20 0.30 0.20 0.20 0.10 0.20 0.30 0.20 0.30 0.20 0.30 0.20 0.30	DF  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prepared od: EPA 3535 07/29/08 00:00	Analyzed  07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05 07/30/08 20:05	83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 191-24-2 207-08-9 218-01-9 53-70-3 206-44-0 86-73-7 193-39-5 90-12-0 91-57-6 91-20-3	Qua

Date: 08/04/2008 10:46 AM

**REPORT OF LABORATORY ANALYSIS** 

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## Appendix D Regulatory Correspondence



BÓARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III

Vice Chairman Steven G. Kisner Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

8 September 2008

BOARD: Henry C. Scott

M. David Mitchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

oles B. H. Yr. H

Beaufort Military Complex Family Housing ATTN: Kyle Broadfoot 1510 Laurel Bay Blvd. Beaufort, SC 29906

Re:

MCAS - Laurel Bay Housing - 286 Birch

Site ID # 04037

UST Closure Reports received 31 January 2008

**Beaufort County** 

Dear Mr. Broadfoot:

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

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

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

Sincerely,

Michael Bishop, Hydrogeologist Groundwater Quality Section

Bureau of Water

cc:

Region 8 District EQC (via pdf)

MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)

Technical File (via pdf)



#### C. Earl Hunter, Commissioner

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

#### 19 December 2008

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

Re:

MCAS - Laurel Bay Housing - 286 Birch

Site ID # 04037

Groundwater Sampling Results received 6 November 2008

**Beaufort County** 

#### Dear Mr. Ehde:

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

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

Sincerely,

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

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

CC:

Region 8 District EQC

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

29906

Technical File