SUMMARY REPORT
150 BIRCH ROAD (FORMERLY 281 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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Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021



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List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

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 150 Birch Road (Formerly 281 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 150 Birch Road (Formerly 281 Birch Road). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 281 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

In June 2007, three 280 gallon heating oil USTs were removed at 150 Birch Road (Formerly 281 Birch Road). Tank 1 was removed on June 19, 2007 from the northwestern portion of the front yard area adjacent to the house. Tank 2 was removed on June 19, 2007 from the northwestern portion of the front yard area adjacent to Tank 1. Tank 3 was removed on June



27, 2007 from the southwestern portion of the front yard area adjacent to the house. 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), 4'9" (Tank 2) and 5'1" (Tank 3) 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 2'0" (Tank 1), 2'6" (Tank 2) and 2'10" (Tank 3). 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 the side walls 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, 2 and 3) 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 location (Tank 3) at 150 Birch Road (Formerly 281 Birch Road) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated September 3, 2008, SCDHEC requested an IGWA be conducted at the former UST locations (Tanks 1, 2, and 3) at 150 Birch Road (Formerly 281 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, a temporary monitoring well was installed at 150 Birch Road (Formerly 281 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 well was placed in the same general location as the former heating oil UST (Tank 3). 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 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 *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 150 Birch Road (Formerly 281 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 150 Birch Road (Formerly 281 Birch Road). This NFA determination was obtained in a letter dated December 17, 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 – 281 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*, November 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 150 Birch Road (Formerly 281 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

		Results Samples Collected 06/19/07 and 07/25/07						
Constituent	SCDHEC RBSLs (1)	281 Birch Bottom 01 06/19/07	281 Birch Side 02 06/19/07	281 Birch Bottom 03 06/19/07	281 Birch Side 04 06/19/07	281 Birch Bottom 05 07/25/07	281 Birch Side 06 07/25/07	
Volatile Organic Compounds Analyze	d by EPA Method 8260B (mg/kg)	•	1	•	•	•	•	
Benzene	0.003	ND	ND	ND	ND	0.00103	0.000511	
Ethylbenzene	1.15	ND	ND	ND	ND	ND	0.00124	
Naphthalene	0.036	ND	ND	ND	ND	0.000926	0.0029	
Toluene	0.627	ND	ND	ND	ND	0.00211	0.00213	
Xylenes, Total	13.01	ND	ND	ND	ND	0.000563	0.00136	
Semivolatile Organic Compounds Ana	alyzed by EPA Method 8270D (mg/kg)			•				
Benzo(a)anthracene	0.66	ND	ND	ND	ND	2.290	ND	
Benzo(b)fluoranthene	0.66	ND	ND	ND	ND	2.220	ND	
Benzo(k)fluoranthene	0.66	ND	ND	ND	ND	0.795	ND	
Chrysene	0.66	ND	ND	ND	ND	2.740	ND	
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND	0.182	ND	

Notes:

(1) 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).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2 Laboratory Analytical Results - Groundwater 150 Birch Road (Formerly 281 Birch Road) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 07/22/08
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:

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

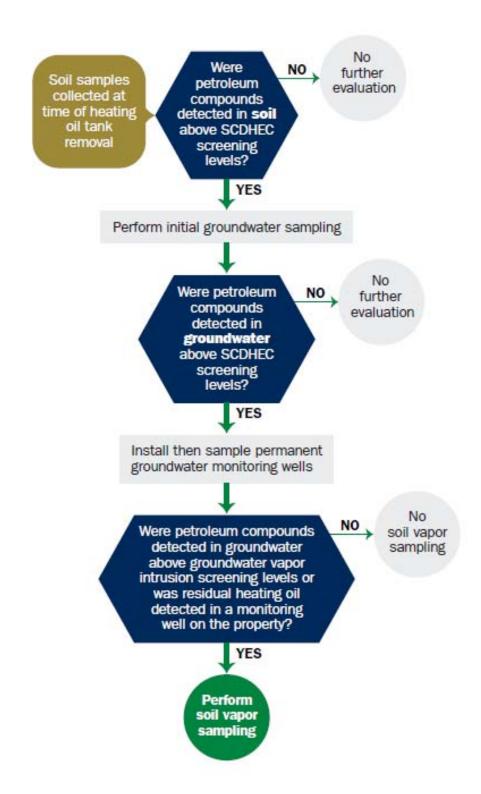
VISL - Vapor Intrusion Screening Level

⁽¹⁾ 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).

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

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 OF UST (S)
Owner Name (Corporation, Individual, Public Agency, Other)
Mailing Address Mailing Address
Beaufort SC 29906 City State Zip Code
Area Code 379-3305 Kyle Broad Foot Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A

Permit 1.D. # Actus Lend Lease Construction

Facility Name or Company Site Identifier

Street Address or State Road (as applicable)

Beaufort SC 29906

City ZIP County

Attachment 2 III. INSURANCE INFORMATION

Insurance Statement
The petroleum release reported to DHEC on\(\nu/A\) at Permit ID #_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.
And
I do/do not (circle one) wish to participate in the Superb Program.
IV. CERTIFICATION (To be signed by the UST owner/operator.)
attached documents; and that based on my inquiry of those individuals responsible for obtaining this and all information, I believe that the submitted information is true, accurate, and complete.
Name (Type or print.)
Signature To be completed by Notary Public:
worn before me this day of, 20
(Name)
otary Public for the state of

•		· . V.	UST INF	ORMATION							
				* .	Tan	k 1 T	ank 2	Tank 3	Tank 4	Tank 5	Tank 6
	A.	Product(ex	. Gas, Kerosei	1е)	# Die	r	\ <u>`</u>	#2			
	B.	Capacity(ex	s. 1k, 2k)	(APPROX)	280	g 28	QB .	DIESEL			
•	C.				2018	A ISA	ME	280G	·		
I	D.			Steel, FRP)	Cdo						
E	3.	Month/Year or	Last Use		lh 🛦	TSA	ME	STEEL			
F.		Depth (ft.) To]			METOLY	1000	M				
G		Spill Prevention	Equipment	Y/N	57"	57	" (51"	-		
H.		Overfill Prevent			\ <u>\</u>	N	1	V			
I.		Method of Closu		\	N	N		N			
J.		Date Tanks Rem	(Filled	Remove	SAM	ERE	MOVEN			
K.		Visible Corrosion		Y/N	6-19-07			- 1			
L.		371. Pr 1	Y/N		N	N	13		_		
М.	λ				N	N	У				
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		Recyc	ling -	Scrap Ste	rel				-		
N.	M dis	ethod of disposal sposal manifests)	for any liquid	petroleum, sludg	es, or wastew	aters r	emov	ed from	the USTs	(attach	
				10 N 11 P WILL 1	~~ <i>(</i>						
^			·	FILL - 6	OLIPIFICA	ion	+	Subt	itle I) LA	rolfell
0.	If a	HY COMOSION mitt	in 1 1	vere observed, des							
		_ 				20	rit	DHDF	But	EMPT	4

VI. PIPING INFORMATION

		T					
A.	Construction	Tank I			Tank 4	Tank 5	Tank 6
	Construction Material(ex. Steel, FRP)	Steer	STEEL				
B.	Distance from UST to Dispenser	* 1	STEEL	STEEL	 		
C.	Number of Dispensers	NIA	NA	NA			
D.	Type of System Pressure or Suction	-0-	-0-	0			
E.	Was Piping Removed from the Ground? Y/N	Electri	SAME	C0			
F.	Visible Corrosion or Pitting Y/N	4	7	SAME			
G.	Visible Holes Y/N			7			
H,	Age	N	N	N			
		N	N	N			
•	If any corrosion, pitting, or holes were observed to	- <u> </u>				.	
	If any corrosion, pitting, or holes were observed, described to the second of the seco	ribe the I	ocation a	nd extent	for each	piping ru	n.
	TANK # 2	Ming	+ Co	RR151	- بدن	NEL	eaks
	THE TO MINON PIH	ing A	and Co	LASSI	in -	Na	LEAKS
	TANK # 2 : MINON PIH TANK # 3 : WINON PIH MINON PIH	piti	ling	on c	OPROS	102-	NA Z
,	VII. BRIEF SITE DESCRIPTION		/				100
-	VII. BRIEF SITE DESCRIPTION AND HI	STOR	\mathbf{Y}				
÷ .	Home Heating Oil TANK						
	. THAK		Kes	IDEN.	TIAL		
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_		- <u>-</u>					 .
		•					
				,			'
			·				

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.		*	1
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.)		+	
C. Was water present in the UST excavation, soil borings, or trenches?			
If yes, how far below land surface (indicate location and depth)?	·	X	
D. Did contaminated soils remain stockpiled on site after closure?			
If yes, indicate the stockpile location on the site map.			
Name of DHEC representative authorizing soil removal:			·
		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters?			
If yes, indicate location and thickness.		X	

IX. SAMPLE INFORMATION

SCDHEC Lab Certification Number DW: 8400900Z

A.

<u>B.</u>	·						
Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1	DOTTON	5	MUNICIPALITY	5 THOMPH	1400	A. Manurcy	ND
2	TANKOI SIDE	3		124"	1400	A Marien	ND
3	TANKOZ BOTTOM	S		57"	1410	CECHEVARRY	<u> </u>
4	JUN 05	5	4	30"	1410	<u> </u>	ND
5	TANKO3 BUTTOM	S	SAND	6111	6-27-07	11	ND
6	TANK 03 SIDE	S	SAND	340	6-27-07	†L	CU
7				<u> </u>	1/2.00		10.5
8							
9	,						
10		٠.					
11							
12							
13							
14							
15			·				
16							
17			· ·				
18				`			
19					`.		
20		<u> </u>			···		

^{* =} Depth Below the Surrounding Land Surface

X.

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.

- EPA Method 8260 B Volatile Organic Compounds - Presentative: Zea Sodium Bisulfate lea
- Preservative: 24 Sodium Bi Sulfate 104
EPA METHOD 8270 Poly Aromatic Hydro CARBONS
No Preservative
ONE (1) SIDEWALL And ONE (1) Bottom.
ONE (1) SIDEWALF And ONE (1) BOHOM SAmple were secured from tank excavation Samples were stoned and shipped in AN INSURATED COOLER W/ ICE.
Samples were stoned and shipped in An
INSURATED Cooled W/ ICE.

XI. RECEPTORS

A. Are there any lakes nords	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.		
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		V
If yes, indicate type of well, distance, and direction on site		
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.		<i></i>
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.	1	<u></u>
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.	1	

SUMMARY OF ANALYSIS RESULTS ρ/A 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		7	d on the fo	
Benzene			-	00-4	SB-5	SB-6	SB-7	SB-8
Toluene		 	 	 -		 	 	
Ethylbenzene		 	 	 -	 	 	 	
Xylenes		 -	 -	 -			· —————	
Naphthalene					 			
Benzo(a)anthracene	 		 					
Benzo(b)flouranthene								
Benzo(k)flouranthene	 							
Chrysene				 		<u> </u>		
Dibenz(a,h)anthracene	 	 						·
PH (EPA 3550)	 - 	- <u>-</u>	 		<u> </u>			
	<u> </u>				.	i	j	

		-						<u></u>
CoC	SB-9	SB-10	SB-11	CD 40	T	 		
Benzene		1 10	00-11	SB-12	SB-13	SB-14	SB-15	SB-16
Toluene	 	 		 	 	 	ļ	ļ
Ethylbenzene					 	ļ — —	 	ļ
Xylenes		 						ļ ———
Naphthalene	 							
Benzo(a)anthracene						-		
Benzo(b)flouranthene								
Benzo(k)flouranthene			<u>_</u>					
Chrysene			<u> </u>					
Dibenz(a,h)anthracene								
ГРН (ЕРА 3550)								
(LI X 3000)						T		

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.

present, indicate the measur	red thickness t	o the neares	t 0.0	I feet.	, иц ц	ie table (pelov	v. If fr	ee 1
CoC	RBSL (µg/l)			W-2		W -3		W -	= 4
Free Product Thickness	None						+		
Benzene	5				1		+		
Toluene	1,000	<u> </u>	7		+	<u>·</u>	+		_
Ethylbenzene	700		1		\dashv		+		\dashv
Xylenes	10,000		+		+		\dagger		$-\parallel$
Total BTEX	N/A		1		╁	 -	+	<u> </u>	$-\parallel$
MTBE	40		+		+		╁	<u> </u>	$-\parallel$
Naphthalene	25		1		\dagger		+	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\parallel
Benzo(a)anthracene	10		\dagger		†		╁		\parallel
Benzo(b)flouranthene	10		\dagger		+-		\vdash		\parallel
Benzo(k)flouranthene	10		 -		†-		-		$\ $
Chrysene	10				 		-		
Dibenz(a,h)anthracen e	10	,							
EDB	.05	 	-		-				
1,2-DCA	.05	:		· ·					
Lead	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)

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:

OQF0493

Project:

LAUREL BAY

Project Number:

EP2362

Sampled: 06/19/07-06/22/07

Received: 06/27/07

LABORATORY REPORT

Sample ID: 281 BIRCH-BOTTOM 01 - Lab Number: OQF0493-01 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Facto		Ву	Method	Batch
Genera NA	al Chemistry Parameters								-, 		Datel
	% Solids	89.1	Q	%.	0.100	0.100	1	060000000000			
71-43-2	e Organic Compounds by EPA Benzene	Method 82	60B	44.4		31700	1	06/28/07 18:30	D RRF	P EPA 160.3	7F28049
100-41-4	Ethylbenzene	0.197	U	ug/kg dry	0.197	0.539	. 1	06/27/07 13:53		En	_
91-20-3	Naphthalene	0.228	U	ug/kg dry	0.228	0.539	1	06/27/07 13:53		EPA 82601	
108-88-3	Toluene	0.298	J4,U	ug/kg dry	0.298	0.539	1	06/27/07 13:53		EPA 82601	
1330-20-7		0.466	Ü	ug/kg dry	0.466	0.539	1	06/27/07 13:53		EPA 8260E	
	: 1,2-Dichloroethane-d4 (73-137%)	0.280	U	ug/kg dry	0.280	0.539	1	06/27/07 13:53		EPA 8260E	
Surroonte	: 4-Bromofluorobenzene (59-118%)	89 %					•	00/2//07 13:53	ЛS	EPA 8260E	3 7F27039
Surropate	Dibromofluoromethane (55-145%)	90 %									
urropate	Toluene-d8 (70-130%)	97 %		•							
Polynuc	Joon A warratt. XX	99 %									
3-32 - 9	lear Aromatic Hydrocarbons Acenaphthene	by EPA Met	hod 823	70							
08-96-8	Acenaphthylene	83.0	U,	ug/kg dry	83.0	187	1	06/29/07 17:48	DE1	ED4 seeso	
20-12-7	Anthracene	110	ប	ug/kg dry	110	187	1	06/29/07 17:48	REM REM		
6-55-3	Benzo (a) anthracene	59.7	U	ug/kg dry	59.7	187	1	06/29/07 17:48		EPA 8270C	
05-99-2	Benzo (b) fluoranthene	20.3	U	ug/kg dry	20.3	187	1	06/29/07 17:48	REM REM	EPA 8270C	
07-08 -9	Benzo (k) fluoranthene	19.7	U	ug/kg dry	19.7	187	ī	06/29/07 17:48	REM		
1-24-2	Benzo (g,h,i) perylene	19.7	U	ug/kg dry	19.7	187	1	06/29/07 17:48		EPA 8270C	
-32-8	Benzo (a) pyrene	19.4	ľ	ug/kg dry	19.4	187	1	06/29/07 17:48	REM	EPA 8270C	7F28007
⊢12 - 0	1-Methylnaphthalene	23.1	U	ug/kg dry	23.1	187		06/29/07 17:48	REM	EPA 8270C	7F28007
8-01-9	Chrysene	94.0	U	ug/kg dry	94.0	187		06/29/07 17:48	REM	EPA 8270C	7F28007
-70-3	Dibenz (a,h) anthracene	22.4	U	ug/kg dry	22.4	187		06/29/07 17:48	REM	EPA 8270C	7F28007
5-44-0	Fluoranthene	24.6	U	ug/kg dry	24.6	187		06/29/07 17:48	REM	EPA 8270C	7F28007
73-7	Fluorene	26.9	ប	ug/kg dry	26.9	187		06/29/07 17:48		EPA 8270C	7F28007
3-39-5	Indeno (1,2,3-cd) pyrene	73.3	U .	ug/kg dry	73.3	187		A 44		EPA 8270C	7F28007
57-6	2-Methylnaphthalene	24.3	ប	ug/kg dry	24.3	187				EPA 8270C	7F28007
20-3	Naphthalene	79.9	U	ug/kg dry	79.9	187	•			EPA 8270C	7F28007
01-8	Phenanthrene	75.2	U	ug/kg dry	75.2	187				EPA 8270C	7F28007
-00-0	Ругеле	44.2	U	ug/kg dry	44.2	187				EPA 8270C	7F28007
		38.1	U	ug/kg dry	38.I	187				EPA 8270C	7F28007
rogate Ni	Fluorobiphenyl (24-121%) trobenzene-d5 (19-1/1%)	64 %				201	, (06/29/07 17:48	REM	EPA 8270C	7F28007
Opate: Te	rphenyl-d14 (44-171%)	63 %									
-Desc. 15	· puenyi-a14 (44-17]%)	102 %									,

LABORATORY REPORT

Sample ID: 281 BIRCH-SIDE 02 - Lab Number: OQF0493-02 - Matrix: Solid/Soil

				Zan Itu	mper: O(2F U493-U	2 - Ma	trix: Solid/Soi	I		
CAS#	Analyte Chemistry Parameters	Result	Q 	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
IA	% Solids Organic Compounds by EPA M Benzene	89.1 Aethod 8260B	Q	% .	0.100	0.100	I	06/28/07 18:30	RRP	EPA 160.3	7F28049
30-41-4	Ethylbenzene	0.204 0.236	U U	ug/kg dry ug/kg dry	0.204 0.236	0.558 0.558		06/27/07 14:10 06/27/07 14:10		EPA 8260B EPA 8260B	7F27039 7F27039

Test/merica 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:

OQF0493

Project:
Project Number:

LAUREL BAY

r: EP2362

Sampled: 06/19/07-06/22/07

Received: 06/27/07

LABORATORY REPORT

Sample ID: 281 BIRCH-SIDE 02 - Lab Number: OQF0493-02 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Volatile	Organic Compounds by EPA	Method 826	0B - C	onf			-				
71-20-3	Maphinalene	0.308	ט בנ	ug/kg dry	0.308	0.558	. 1	06/27/07 14:10	II C	ED4 4260D	#FO#GOO
108-88-3	Toluene	0.482	ซ	ug/kg dry	0.482	0.558	1	06/27/07 14:10		EPA 8260B	
1330-20 - 7	>	0.290	U	ug/kg dry	0.290	0.558	1		JLS	EPA 8260B	7F27039
Surrogate:	1,2-Dichloroethane-d4 (73-137%)	88 %			0.270	0.236	1	06/27/07 14:10	JLS	EPA 8260B	7F27039
Surrogate:	4-Bromofluorobenzene (59-118%)	83 %									
	Dibromofluoromethane (55-145%)	98 %									
	Toluene-d8 (70-130%)	96 %							•		
Polynuc	lear Aromatic Hydrocarbons	by EPA Meth	od 827	70							
33-32-9	Acenaphthene	83.1	บ	ug/kg dry	83.1	187	1	06/29/07 18:10	REM	ED 1 02500	500000
?08-96 - 8	Acenaphthylene	110	U	ug/kg dry	110	187	i	06/29/07 18:10			7F28007
.20-12-7	Anthracene	59.8	U	ug/kg dry	59.8	187	1		REM	EPA 8270C	7F28007
i6-55 - 3	Benzo (a) anthracene	20.3	บ	ug/kg dry	20.3	187	1	06/29/07 18:10	REM		7F28007
105-99-2	Benzo (b) fluoranthene	. 19.7	Ū	ug/kg dry	19.7	187	-	06/29/07 18:10	REM	EPA 8270C	7F28007
:07-08-9	Benzo (k) fluoranthene	19.7	U	ug/kg dry	19.7	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
91-24-2	Benzo (g,h,i) perylene	19.5	Ü	ug/kg dry	19.5	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
0-32-8	Benzo (a) pyrene	23.1	U	ug/kg dry	23.1	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
. '0-12-0	1-Methylnaphthalene	94.1	U	ug/kg dry	94.1		Į.	06/29/07 18:10	REM	EPA 8270C	7F28007
18-01-9	Chrysene	22.4	U	ug/kg dry	22.4	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
3-70-3	Dibenz (a,h) anthracene	24.6	ט	ug/kg dry	24.6	187		06/29/07 18:10	REM	EPA 8270C	7F28007
06-44-0	Fluoranthene	27.0	U	ug/kg dry		187		06/29/07 18:10	REM	EPA 8270C	7F28007
6-73- 7	Fluorene	73.4	U	- •	27.0	187		06/29/07 18:10	REM	EPA 8270C	7F28007
93-39-5	Indeno (1,2,3-cd) pyrene	24.3	U	ug/kg dry	73.4	187		06/29/07 18:10	REM	EPA 8270C	7F28007
1-57-6	2-Methylnaphthalene	79.9	บ	ug/kg dry	24.3	187		· ·	REM	EPA 8270C	7F28007
1-20-3	Naphthalene	75.3		ug/kg dry	79.9	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
5-01-8	Phenanthrene	44.2	U	ug/kg dry	75.3	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
29-00-0	Pyrene	38.1	U	ug/kg dry	44.2	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
urrogate: 2-	-Fluorobiphenyl (24-121%)	57 %	U	ug/kg dry	38.1	187	1	06/29/07 18:10	REM	EPA 8270C	7F28007
	itrobenzene-d5 (19-111%)										
	erphenyl-d14 (44-171%)	57%									
- D 1	E	87%									

LABORATORY REPORT

Sample ID: 281 BIRCH-BOTTOM 03 - Lab Number: OQF0493-03 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
leneral	Chemistry Parameters			· · · · · ·							
A	% Solids	89.8	Q	%.	0.100	0.100	1	06/28/07 18:30	nnn	ED4 160 2	2700040
'olatile (Organic Compounds by EPA	Method 8260B	•			0.100	. 1	00/20/07 18:30	RRP	EPA 160.3	7F28049
1-43-2	Benzene	0.204	U	ug/kg dry	0.204	0.557	1	06/27/07 14:28	ЛS	TD 4 80 CAD	7770.500.0
10-41-4_	Ethylbenzene	0.236	Υſ	ug/kg dry	0.236				•	EPA 8260B	7F27039
20-3	Naphthalene	0.308				0.557_		<u>.06/27/07_14:28</u>	_ILS	<u>EPA 8260B</u>	7F27039
18-88-3	Toluene		U	ug/kg dry	0.308	0.557	1	06/27/07 14:28	JLS	EPA 8260B	7F27039
_		0.481	U	· ug/kg dry	0.481	0.557	1	06/27/07 14:28	JLS	EPA 8260B	7F27039
130-20-7 _,	Xylenes, total	0.289	U	ug/kg dry	0.289	0.557	•	· -			
vrrogate: I	,2-Dichloroethane-d4 (73-137%)	88 %	-		0.207	0.557	1	06/27/07 14:28	ЛS	EPA 8260B	7F27039

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

JOHN MAHONEY Attn:

Work Order: Project:

OQF0493

Project Number:

LAUREL BAY EP2362

Sampled: 06/19/07-06/22/07

Received: 06/27/07

LABORATORY REPORT

Sample ID: 281 BIRCH-BOTTOM 03 - Lab Number: OQF0493-03 - Matrix: Solid/Soil

Result	_				D.I				
	Q	Units	MDL	PQL	Dil Factor	Analyzed	Rv	Method	Datab
Method 826 90 % 97 % 98 %	60B - C	ont. 10 ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry	82.4 109 59.3 20.1 19.6 19.6 19.3	186 186 186 186 186 186	Factor I I I I I I I I	06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32	REM REM REM REM REM REM	EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C	7F28007 7F28007 7F28007 7F28007 7F28007 7F28007 7F28007
	_	ug/kg dry	19.3 22.9 93.4 22.3 24.4 26.8 72.8 24.1 79.3 74.7 43.9 37.8	186 186 186 186 186 186 186 186 186	1	06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32 06/29/07 18:32	REM REM REM REM REM REM REM REM REM REM	EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C	
	90 % 97 % 98 % y EPA Met 82.4 109 59.3 20.1 19.6 19.3 22.9 93.4 22.3 24.4 26.8 72.8 24.1 79.3 74.7 43.9 37.8 70 %	90 % 97 % 98 % y EPA Method 82' 82.4 U 109 U 59.3 U 20.1 U 19.6 U 19.6 U 19.3 U 22.9 U 93.4 U 22.3 U 24.4 U 26.8 U 72.8 U 24.1 U 79.3 U 74.7 U 43.9 U 37.8 U 70 % 72 %	97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 109 U ug/kg dry 59.3 U ug/kg dry 20.1 U ug/kg dry 19.6 U ug/kg dry 19.6 U ug/kg dry 19.3 U ug/kg dry 22.9 U ug/kg dry 22.9 U ug/kg dry 22.3 U ug/kg dry 24.4 U ug/kg dry 24.4 U ug/kg dry 24.4 U ug/kg dry 24.4 U ug/kg dry 24.1 U ug/kg dry 72.8 U ug/kg dry 79.3 U ug/kg dry	90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 82.4 109 U ug/kg dry 109 59.3 U ug/kg dry 20.1 19.6 U ug/kg dry 19.6 19.3 U ug/kg dry 19.6 19.3 U ug/kg dry 19.3 22.9 U ug/kg dry 22.9 93.4 U ug/kg dry 22.9 93.4 U ug/kg dry 22.3 24.4 U ug/kg dry 24.4 26.8 U ug/kg dry 26.8 72.8 U ug/kg dry 24.1 79.3 U ug/kg dry 72.8 24.1 U ug/kg dry 79.3 74.7 U ug/kg dry 79.3 74.7 U ug/kg dry 43.9 37.8 U ug/kg dry 37.8 70 % 72 %	90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 82.4 186 109 U ug/kg dry 109 186 59.3 U ug/kg dry 20.1 186 19.6 U ug/kg dry 19.6 186 19.6 U ug/kg dry 19.6 186 19.3 U ug/kg dry 19.3 186 22.9 U ug/kg dry 22.9 186 93.4 U ug/kg dry 22.9 186 93.4 U ug/kg dry 22.3 186 22.3 U ug/kg dry 23.4 186 22.3 U ug/kg dry 24.4 186 26.8 U ug/kg dry 24.4 186 26.8 U ug/kg dry 26.8 186 72.8 U ug/kg dry 24.1 186 79.3 U ug/kg dry 72.8 186 24.1 U ug/kg dry 24.1 186 79.3 U ug/kg dry 79.3 186 74.7 U ug/kg dry 79.3 186 74.7 U ug/kg dry 79.3 186 74.7 U ug/kg dry 74.7 186 43.9 U ug/kg dry 43.9 186 37.8 U ug/kg dry 37.8 186	Method 8260B - Cont. 90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 109 186 1 109 U ug/kg dry 59.3 186 1 20.1 U ug/kg dry 19.6 186 1 19.6 U ug/kg dry 19.6 186 1 19.6 U ug/kg dry 19.6 186 1 19.3 U ug/kg dry 19.3 186 1 22.9 U ug/kg dry 22.9 186 1 93.4 U ug/kg dry 22.9 186 1 22.3 U ug/kg dry 93.4 186 1 22.3 U ug/kg dry 24.4 186 1 24.4 U ug/kg dry 24.4 186 1 26.8 U ug/kg dry 26.8 186 1 72.8 U ug/kg dry 24.1 186 1 79.3 U ug/kg dry 72.8 186 1 79.3 U ug/kg dry 74.7 186 1 0 74.7 U ug/kg dry 79.3 186 1 0 74.7 U ug/kg dry 74.7 186 1 0 37.8 U ug/kg dry 37.8 186 1 0 37.8 U ug/kg dry 37.8 186 1 0 70 % 70 % 72 %	Method 8260B - Cont. 90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 109 186 1 06/29/07 18:32 109 U ug/kg dry 59.3 186 1 06/29/07 18:32 20.1 U ug/kg dry 19.6 186 1 06/29/07 18:32 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 19.8 U ug/kg dry 19.3 186 1 06/29/07 18:32 22.9 U ug/kg dry 19.3 186 1 06/29/07 18:32 22.9 U ug/kg dry 22.9 186 1 06/29/07 18:32 22.3 U ug/kg dry 93.4 186 1 06/29/07 18:32 22.3 U ug/kg dry 22.3 186 1 06/29/07 18:32 24.4 U ug/kg dry 24.4 186 1 06/29/07 18:32 24.4 U ug/kg dry 24.4 186 1 06/29/07 18:32 24.4 U ug/kg dry 26.8 186 1 06/29/07 18:32 24.1 U ug/kg dry 24.1 186 1 06/29/07 18:32 24.1 U ug/kg dry 24.1 186 1 06/29/07 18:32 24.1 U ug/kg dry 72.8 186 1 06/29/07 18:32 24.1 U ug/kg dry 79.3 186 1 06/29/07 18:32 24.1 U ug/kg dry 79.3 186 1 06/29/07 18:32 24.1 U ug/kg dry 79.3 186 1 06/29/07 18:32 24.1 U ug/kg dry 79.3 186 1 06/29/07 18:32 24.1 U ug/kg dry 79.3 186 1 06/29/07 18:32 37.8 U ug/kg dry 37.8 186 1 06/29/07 18:32 37.8 U ug/kg dry 37.8 186 1 06/29/07 18:32	Method 8260B - Cont. 90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 109 186 1 06/29/07 18:32 REM 109 U ug/kg dry 59.3 186 1 06/29/07 18:32 REM 20.1 U ug/kg dry 20.1 186 1 06/29/07 18:32 REM 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM 19.3 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM 19.3 U ug/kg dry 19.3 186 1 06/29/07 18:32 REM 22.9 U ug/kg dry 22.9 186 1 06/29/07 18:32 REM 93.4 U ug/kg dry 93.4 186 1 06/29/07 18:32 REM 22.3 U ug/kg dry 93.4 186 1 06/29/07 18:32 REM 22.3 U ug/kg dry 22.3 186 1 06/29/07 18:32 REM 24.4 U ug/kg dry 24.4 186 1 06/29/07 18:32 REM 26.8 U ug/kg dry 26.8 186 1 06/29/07 18:32 REM 72.8 U ug/kg dry 72.8 186 1 06/29/07 18:32 REM 79.3 U ug/kg dry 72.8 186 1 06/29/07 18:32 REM 79.3 U ug/kg dry 79.3 186 1 06/29/07 18:32 REM 79.3 U ug/kg dry 79.3 186 1 06/29/07 18:32 REM 43.9 U ug/kg dry 43.9 186 1 06/29/07 18:32 REM 43.9 U ug/kg dry 43.9 186 1 06/29/07 18:32 REM 43.9 U ug/kg dry 43.9 186 1 06/29/07 18:32 REM 37.8 U ug/kg dry 37.8 186 1 06/29/07 18:32 REM	Method 8260B - Cont. 90 % 97 % 98 % y EPA Method 8270 82.4 U ug/kg dry 109 186 1 06/29/07 18:32 REM EPA 8270C 59.3 U ug/kg dry 59.3 186 1 06/29/07 18:32 REM EPA 8270C 20.1 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM EPA 8270C 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM EPA 8270C 19.6 U ug/kg dry 19.6 186 1 06/29/07 18:32 REM EPA 8270C 19.3 U ug/kg dry 19.3 186 1 06/29/07 18:32 REM EPA 8270C 22.9 U ug/kg dry 22.9 186 1 06/29/07 18:32 REM EPA 8270C 22.3 U ug/kg dry 93.4 186 1 06/29/07 18:32 REM EPA 8270C 24.4 U ug/kg dry 22.3 186 1 06/29/07 18:32 REM EPA 8270C 24.5 U ug/kg dry 24.4 186 1 06/29/07 18:32 REM EPA 8270C 24.6 U ug/kg dry 24.4 186 1 06/29/07 18:32 REM EPA 8270C 24.1 U ug/kg dry 24.1 186 1 06/29/07 18:32 REM EPA 8270C 24.1 U ug/kg dry 72.8 186 1 06/29/07 18:32 REM EPA 8270C 24.1 U ug/kg dry 72.8 186 1 06/29/07 18:32 REM EPA 8270C 24.1 U ug/kg dry 72.8 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 79.3 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 74.7 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 74.7 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 43.9 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 74.7 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 37.8 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 74.7 186 1 06/29/07 18:32 REM EPA 8270C 37.8 U ug/kg dry 37.8 186 1 06/29/07 18:32 REM EPA 8270C

LABORATORY REPORT

Sample ID: 281 BIRCH-SIDE 04 - Lab Number: OQF0493-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed	Ву	Method	Batch
General	Chemistry Parameters			-				Date/Time	23	MCGIOG	DAICH
IA.	% Solids	85.6	0	%.	0.100			1			
Jolatile (1-43-2	Organic Compounds by EPA	Method 8260	R		0.100	0.100	1	06/28/07 18:30	RRP	EPA 160.3	7F28049
	осилеце	0.210	ับ๋	ug/kg dry	0.210	0.575		04.000.00			
00-41-4	Ethylbenzene	0.243	บ	ug/kg dry			Ţ	06/28/07 12:29	JWT	EPA 8260B	7F27039
1-20-3	Naphthalene	0.318			0.243	0.57 <i>5</i>	1	06/28/07 12:29	JWT	EPA 8260B	7F27039
)8-88-3	Toluene		U	ug/kg dry	0.318	0.575	1	06/28/07 12:29	JWT	EPA 8260B	7F27039
330-20-7	Xylenes, total	0.497	U	ug/kg dry	0.497	0.575	1	06/28/07 12:29	JWT	EPA 8260B	7F27039
urrogate:]	2-Dichloroethane-d4 (73-137%)	0.299 85 %	U ·	ug/kg dry	0.299	0.575	1	06/28/07 12:29	JWT	EPA 8260B	7F27039 7F27039
errogate: 4	-Bromofluorobenzene (59-118%)	90 %									
ırrogate: L	Dibromofluoromethane (55-145%)	98 %	٠								
urogate: T	oluene-d8 (70-130%)	98 %			•						

olynuclear Aromatic Hydrocarbons by EPA Method 8270

98 %

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:

OQF0493

Project:

LAUREL BAY

Project Number:

EP2362

Sampled: 06/19/07-06/22/0

Received: 06/27/07

LABORATORY REPORT

Sample ID: 281 BIRCH-SIDE 04 - Lab Number: OQF0493-04 - Matrix: Solid/Soil

						ZZ 0122-0	- IATS	atrix: Solid/So)11		
CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Facto	Analyzed	D.	3.4-41 - 1	
Polynuc	elear Aromatic Hydrocarbo	ne by EDA Mad	1 . 1 00					T Date/Time	Ву	Method	Batch
83-32-9	Acenaphthene	86.5									
208-96-8	Acenaphthylene	114	U	ug/kg dry	86.5	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
120-12-7	Anthracene		U	ug/kg dry	114	195	1	06/29/07 18:53			
56- 55- 3	Benzo (a) anthracene	62.2	Ų	ug/kg dry	62.2	195	1	06/29/07 18:53	_	EPA 8270C	
205-99-2	Benzo (b) fluoranthene	21.1	บ	ug/kg dry	21.1	195	1	06/29/07 18:53		EPA 8270C	
207-08-9	Benzo (k) fluoranthene	20.5	υ	ug/kg dry	20.5	195	1			EPA 8270C	
191-24-2		20.5	U	ug/kg dry	20.5	195	,	06/29/07 18:53		EPA 8270C	7F28007
50-32-8	Benzo (g,h,i) perylene	20.2	U	ug/kg dry	20.2	195	1	06/29/07 18:53		EPA 8270C	7F28007
)0-12 - 0	Benzo (a) pyrene	24.0	U	ug/kg dry	24.0	195	. 1	06/29/07 18:53	REM	EPA 8270C	7F28007
218-01-9	I-Methylnaphthalene	97.9	บ	ug/kg dry	97.9	-	1	06/29/07 18:53	REM	EPA 8270C	7F28007
53-70-3	Chrysene	23.3	ប	ug/kg dry	23.3	195 .	1	06/29/07 18:53	REM	EPA 8270C	7F28007
-	Dibenz (a,h) anthracene	25.6	Ū	ug/kg dry		195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
206-44-0	Fluoranthene	28.1	U	ug/kg drv	25.6	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
16-73-7	Fluorene	76.4	U		28.1	195	1	06/29/07 18:53	PEM	EPA 8270C	7F28007
93-39 - 5	Indeno (1,2,3-cd) pyrene	25.3	-	ug/kg dry	76.4	195	1	06/29/07 18:53	REM	EPA 8270C	7F28007
1-57-6	2-Methylnaphthalene	83.2	U ••	ug/kg dry	25.3	195	1	06/29/07 18:53		EPA 8270C	7F28007
1-20-3	Naphthalene	78.4	U	ug/kg dry	83.2	195		06/29/07 18:53		EPA 8270C	7F28007
5-01-8	Phenanthrene	•	U	ug/kg dry	78.4	195		06/29/07 18:53		EPA 8270C	-
29-00-0	Ругене	46.0	υ.	ug/kg dry	46.0	195		06/29/07 18:53			7F28007
urrogate: 2-	Fluorobiphenyl (24-121%)	39.6	U	ug/kg dry	39.6	195		06/29/07 18:53		EPA 8270C	7F28007
urrogate: Ni	trobenzene-d5 (19-111%)	68 %					•	20/27/01 10:33	KEM	EPA 8270C	7F28007
urrogate: Te	rphenyl-d14 (44-171%)	67 %									
<u>.</u>	- C. 1917 - 1717 (44-17176)	102 %						*•			

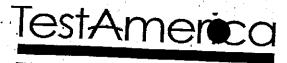
LABORATORY REPORT

Sample ID: 283 BIRCH-BOTTOM 01 - Lab Number: OQF0493-05

CAS#	Analyte					<u></u>		Matrix: Solid/	2017		
		Result	Q	Units	MDL	PQL	Dil Factor	Analyzed	Ву	Mask- d	
eneral A	Chemistry Parameters							Date/Time		Method	Batch
-	% Solids	82.4	Q	%.	0.100	0.100					
-43-2	Organic Compounds by EPA Benzene	Method 826	0B		0.100	0.100	1	06/28/07 18:30	RRP	EPA 160.3	7F28049
0-41-4	Ethylbenzene	0.212	U	ug/kg dry	0.212	0.580	1	06/27/07 15:06	W 6		•
-20-3	Naphthalene	0.246	U	ug/kg dry	0.246	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039
3-88-3	Toluene	0.321	ប	ug/kg dry	0.321	0.580	ı	06/27/07 15:06	JLS JLS	EPA 8260B	7F27039
0-20-7	Xylenes, total	0.501 0.301	U	ug/kg dry	0.501	0.580	1	06/27/07 15:06	JLS	EPA 8260B EPA 8260B	7F27039
rogate: 1	,2-Dichloroethane-d4 (73-137%)	90 %	U	ug/kg dry	0.301	0.580	1	06/27/07 15:06	JLS	EPA 8260B	7F27039 7F27039
Ogate: 4	-Bromofluorobenzene (59-11896)	94 %									1121039
ogate: D	Dibromofluoromethane (55-145%)	97%			•				*		
ogate: Te	oluene-d8 (70-130%)	100 00									
<u>ynuclea</u>	ar Aromatic Hydrocarbons b	Y EPA Meth	od 8270)	•			·			
2-9 96-8	1	89.8	U	ug/kg dry	89.8	203		06/20/207			
12-7	Acenaphthylene Anthracene	119	U	ug/kg dry	119	203		· ·	REM	EPA 8270C	7F28007
i-3	Benzo (a) authracene	64.7	U	ug/kg dry	64.7	203			REM	EPA 8270C	7F28007
	(a) animacene	45.3	I	ug/kg dry	22.0	203			REM REM	EPA 8270C	7F28007

TestAmerica - Orlando, FL Enid Ortiz For Shali Brown

Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

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:

OQG0558

Project:

LAUREL BAY

Project Number:

EP 2362

Sampled: 07/25/07

Received: 07/27/07

LABORATORY REPORT

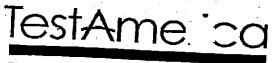
Sample ID: 1177 BOGWHITE SIDE 01 - Lab Number: OQG0558-08 - Matrix: Solid/Soil

G. 1. 5. 11								THEFT IN DURIN	AGOIT		
CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Ratch
36-73-7 193-39-5 91-57-6 91-20-3 35-01-8	lear Aromatic Hydrocarbon Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene 2-Methylnaphthalene Naphthalene Phenanthrene	28.5 77.6 25.7 84.6 79.7 46.8	bod 827 ບ ບ ບ ບ ບ	70 - Cont. ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry	28.5 77.6 25.7 84.6 79.7	198 198 198 198	1 1 1 1	08/09/07 00:22 08/09/07 00:22 08/09/07 00:22 08/09/07 00:22 08/09/07 00:22	REM REM REM	Method EPA 8270C EPA 8270C EPA 8270C EPA 8270C EPA 8270C	7H01015 7H01015 7H01015 7H01015 7H01015
iurrogate: N	Pyrene P-Fluorobiphenyl (24-121%) Vitrobenzene-d5 (19-111%) Ferphenyl-d14 (44-171%)	40.3 31 % 29 % 76 %	u	ug/kg dry	46.8 40.3	198 198		08/09/07 00:22 08/09/07 00:22		EPA 8270C EPA 8270C	7H01015 7H01015

LABORATORY REPORT

Sample ID: 281 BIRCH BOTTOM 05 - Lab Number: OQG0558-09 - Matrix: Solid/Soil

- · - ·								THEFT IN SOME	110011		
CAS #	Analyte	Result	•	Q ` Units	MDL	PQL	Dil Facto	Analyzed			
Genera	al Chemistry Parameters			-			1 2010	Date/Time	Ву	Method	Batch
٩A	% Solids	85.4		97		•					
Volatil	le Organic Compounds by EP	Mathod 8260	m	%.	0.100	0.100	1	08/01/07 17:5	O RRF	EPA 160.3	7H01058
		1.03	ъ								
00-41-4	Durytochizelle	0.426	U	ug/kg dry	0.368	1.01	1	08/03/07 18:50	O JWT	EPA 8260E	7H03050
1-20-3	Naphthalene	0.926	_	ug/kg dry	0.426	1.01	1	08/03/07 18:50	JWT		
08-88-3	Toluene	2.11	1	ug/kg dry	0.556	1.01	1	08/03/07 18:50	JWT		1112000
330-20-7	7 Xylenes, total	0.563		ug/kg dry	0.869	1.01	1	08/03/07 18:50) JWT	EPA 8260B	,
urrogate	: 1,2-Dichloroethane-d4 (73-137%)	126%	V,I	ug/kg dry	0.523	1.01	1	08/03/07 18:50		EPA 8260B	
urrogate	: 4-Bromofluorobenzene (59-118%)	120 % 96 %							• • • • •	DI 11 0200D	703030
urrogate:	: Dibromofluoromethane (55-145%)	90 % 107 %		•					į		
urrogate:	: Toluene-d8 (80-117%)	100.07									
'olynuc	lear Aromatic Hydrocarbons	nov Tara a se ca									
3-32-9	Acenaphthene	Dy EPA Metho								•	
Э8 -9 6-8	Acenaphthylene	173	Ĭ	ug/kg dry	86.7	196	1	08/09/07 00:44	REM	EPA 8270C	7H01015
20-12-7	Anthracene	321	Ŭ	ug∕kg dry	114	196	1	08/09/07 00:44	REM	EPA 8270C	
5-55-3	Benzo (a) anthracene			ug/kg dry	62.4	196	1	08/09/07 00:44	REM	EPA 8270C	7H01015
J5-99-2	Benzo (b) fluoranthene	2290		ug/kg dry	21.2	196	I	08/09/07 00:44	REM		7H01015
)7-08-9	Benzo (k) fluoranthene	2220		ug/kg dry	20.6	196		08/09/07 00:44	REM	EPA 8270C	7H01015
)1-24-2	Benzo (g,h,i) perylene	795		ug/kg dry	20.6	196		08/09/07 00:44	REM	EPA 8270C	7H01015
)-32-8	Benzo (a) pyrene	571		ug/kg dry	20.3	196		08/09/07 00:44	1	EPA 8270C	7H01015
)-12-0	1-Methylnaphthalene	1350		ug/kg dry	24.1	196		08/09/07 00:44	REM	EPA 8270C	7H01015
!8-01-9	Chrysene	685		ug/kg dry	98.2	196			REM	EPA 8270C	7H01015
3-70-3		2740		ug/kg dry	23.4	196		08/09/07 00:44		EPA 8270C	7H01015
)6-44-0	Dibenz (a,h) anthracene	182	ī	ug/kg dry	25.7	196		08/09/07 00:44		EPA 8270C	7H01015
3-73-7	Fluoranthene	1980		ug/kg dry	28.1	196			REM	EPA 8270C	7H01015
	Fluorene	328		ug/kg dry	76.6				REM	EPA 8270C	7H01015
3-39-5	Indeno (1,2,3-cd) pyrene	603		ug/kg dry	25.3	196			REM	EPA 8270C	7H01015
				-BUE OIL	43.5	196	1 0	8/09/07 00:44	REM	EPA 8270C	7H01015



THE LEADER IN ENVIRONMENTAL TESTING

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: Project:

OQG0558

Project Number:

LAUREL BAY EP 2362

Sampled: 07/25/07

Received: 07/27/07

LABORATORY REPORT

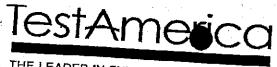
Sample ID: 281 BIRCH BOTTOM 05 - Lab Number: OQG0558-09 - Matrix: Solid/Soil

CAS#	A	OQG0558-09 - Matrix: Solid/Soil												
	Analyte ear Aromatic Hydrocarbo 2-Methylnaphthalene	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch			
91-20-3 85-01-8 129-00-0 Surrogate: 2 Surrogate: N	2-Methylnaphthalene Naphthalene Phenanthrene Pyrene !-Fluorobiphenyl (24-121%) litrobenzene-d5 (19-111%) erphenyl-d14 (44-171%)	517 78.5 714 2040 56 % 54 % 122 %	บ	U - Cont. ug/kg dry ug/kg dry ug/kg dry ug/kg dry	83.4 78.5 46.1 39.7	196 196 196 196	1 1	08/09/07 00:44 08/09/07 00:44 08/09/07 00:44 08/09/07 00:44	REM REM	EPA 8270C EPA 8270C EPA 8270C EPA 8270C	7H01015 7H01015			
		1	Land)D (E055										

LABORATORY REPORT

Sample ID: 281 BIRCH SIDE 06 - Lab Number: OQG0558-10 - Matrix: Solid/Soil

CAS#	A	Sab Number: OQG0558-10 - Matrix: Solid/Soil												
	Analyte	Result		Q Units	MDL	PQL	Di Fact	Analyzed						
General NA	Chemistry Parameters							Or Date/Time	Ву	Method	Batch			
.NA.	% Solids	86.9		%.										
Volatile 71-43-2	Organic Compounds by EP Benzene	A Method 82	60B	/d.	0.100	0.100	1	08/01/07 17:5	O RRF	EPA 160.3	7H01058			
100-41-4	Ethylbenzene	0.511	I	ug/kg dry	0.390	1.07	1	08/03/07 15:5						
91-20-3	Naphthalene	1.24		цg/kg dry	0.451	1.07	1							
108-88-3	Toluene	2.90		ug/kg dry	0.588	1.07	1	08/03/07 15:58						
1330-20-7	Xylenes, total	2.13		ug/kg dry	0.920	1.07	1	08/03/07 15:58		EPA 8260E				
	1,2-Dichloroethane-d4 (73-137%)	1.36	V	ug/kg dry	0.553	1.07	1	08/03/07 15:58		EPA 8260E				
Surrogate:	4-Bromofluorobenzene (59-118%)	122 %				1.07	1	08/03/07 15:58	JWT	EPA 8260B	7H03050			
urrogate: I	Dibromofluoromethane (55-145%)	96 %												
urrogate: I	Toluene-d8 (80-117%)	110 %												
Polynucle	ear Aromatic Hydroson	99 %												
3-32-9	ear Aromatic Hydrocarbons Acenaphthene	by EPA Met	hod 82	70										
08-96-8	Acenaphthylene	85.1	Ū	ug/kg dry	85.1	192	1	08/09/07 01:07	DEL C	****	1.			
20-12-7	Anthracene	112	U	ug/kg dry	112	192	1	08/09/07 01:07	REM	EPA 8270C	7H01015			
5-55-3	Benzo (a) anthracene	61.2	Ū	ug/kg dry	61.2	192	1	08/09/07 01:07	REM	EPA 8270C	7H01015			
5-99-2	Benzo (b) fluoranthene	20.8 20.2	Ū	ug/kg dry	20.8	192	1	08/09/07 01:07	REM REM	EPA 8270C	7H01015			
7-08-9	Benzo (k) fluoranthene		U	ug/kg dry	20.2	192	1	08/09/07 01:07	REM	EPA 8270C	7H01015			
1-24-2	Benzo (g,h,i) perylene	20.2	U	ug/kg dry	20.2	192	. 1	08/09/07 01:07		EPA 8270C	7H01015			
-32-8	Benzo (a) pyrene	19.9	Ų	ug/kg dry	19.9	192		08/09/07 01:07		EPA 8270C	7H01015			
-12-0	1-Methylnaphthalene	23.6 96.4	U	ug/kg dry	23.6	192		08/09/07 01:07		EPA 8270C	7H01015			
B-01-9	Chrysene	· ·	U	ug/kg đry	96.4	i92		08/09/07 01:07		EPA 8270C	7H01015			
70-3	Dibenz (a,h) anthracene	23.0	U	ug/kg dry	23.0	192			_	EPA 8270C	7H01015			
5 - 44-0	Fluoranthene	25.2 27.6	Ū	ug/kg dry	25.2	192		0.0.00		EPA 8270C	7H01015			
73-7	Fluorene	27.6 75.2	U	ug/kg dry	27.6	192			,	EPA 8270C	7H01015			
-39-5	Indeno (1,2,3-cd) pyrene	73.2	U	ug/kg dry	75.2	192				EPA 8270C	7H01015			
57-6	2-Methylnaphthalene		0	ug/kg dry	24.9	192					7H01015			
0-3	Naphthalene	81.9 77.1	Ū	ug/kg dry	81.9	192					7H01015			
	Phenanthrene	77.1 45.3	Ū	ug/kg dry	77.1	192					7H01015			
00-0	Ругеле	43.3 39.0	U	ug/kg dry	45.3	192			_	_	7H01015			
		J.Y.U	Ū	ug/kg dry	39.0	192		0.000.00	_		7H01015			
TestAr	merica - Orlando, FL						- 0	% (1.10) OKONO	REM E	EPA 8270C	7H01015			



THE LEADER IN ENVIRONMENTAL TESTING

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

Dil

Factor

PQL

Analyzed

Date/Time

Ву

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY

CAS#

Work Order:

OQG0558

Project:

LAUREL BAY

Project Number:

EP 2362

MDL

Sampled: 07/25/07

Received: 07/27/07

Method

Batch

LABORATORY REPORT

Sample ID: 281 BIRCH SIDE 06 - Lab Number: OQG0558-10 - Matrix: Solid/Soil

Units Polynuclear Aromatic Hydrocarbons by EPA Method 8270 - Cont.

Surrogate: 2-Fluorobiphenyl (24-121%)

Analyte

43 % 41 %

Result

Surrogate: Nitrobenzene-d5 (19-111%) Surrogate: Terphenyl-d14 (44-171%)

103 %

Test/America To assist us in using the proper analytical methods is this work being conducted for regulatory purposes? Compliance Monitoring Client Name Cllent #: 241) Project Name: City/State/Zip Code: Project #: Project Manager: MAHONEY Site/Location ID: State Telephone Number: Fax Report To: Sampler Name: (Print Name) Invoice To: Sampler Signature: Quote #: PO#: Matrix Preservation & # of Containers TAT Analyze For: X Standard QC Deliverables Rush (surcharges may apply) None ∆ Level 2 Date Needed: (Batch QC) Fax Results: Y N Level 3 Level 4 Other: SAMPLE ID REMARKS BIRCH BOFTOM O' 293 BIRCH BOTTOM Special instructions: LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp: 6-Relinquished By: Custody Seals: Y N N/A Bottles Supplied by Test America: Y Received By Time 9:50 8623 2591.1107/ Method of Shipment: Fe05X-674 Relinquished By: Date: Time: Received By: Time:

Testamerica
ANALYTICAL TESTING CORPORATION

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

Client Name	-ERG	:				Olina		29	611			4	Con	pliance	Monit	toring	regulato	жу ри 	irposes?	
. Address:	Poi	30× 1	1096			Cilen	I #;	21	//_	_ ·			•	,		,	7	,		
City/State/Zip Code:		PICASI								`	Projec	t Name	e:		tur	ef	3	Ar	1	
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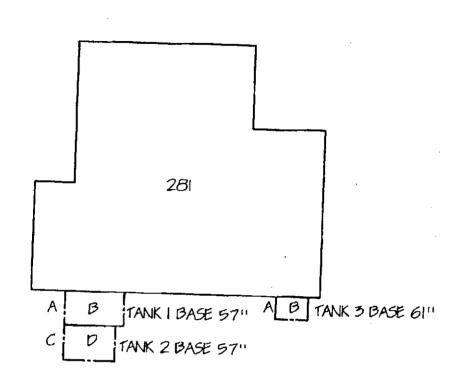








281 BIRCH FRONT 6-19-07 37"↓ ()24" DEPTH: 57" BASE DEPTH 61". TANK #3 TANK#1 JANK#2



BIRCH DRIVE

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 42" B-SOIL TEST BOTTOM SAMPLE @ 57"



TANK 2 EXCAVATION

C-SOIL TEST SIDE SAMPLE @ 42" D-SOIL TEST BOTTOM SAMPLE @ 57"

TANK 3 EXCAVATION

C-SOIL TEST SIDE SAMPLE @ 48" D-SOIL TEST BOTTOM SAMPLE @ 61"

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BEAUPORT MILITARY COMPLEX FAMILY HOUSENG

SITE ADDRESS :

281 BIRCH DRIVE

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

EPG INC. 9/27/2007 EPG INC.

P.O. BOX 1096

MOUNT PLEASANT, SC 29465-1096

Appendix C Laboratory Analytical Report - Groundwater





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

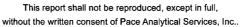
Pace Project No.: 9224083

Sample: 281 BIRCH A	Lab ID: 9	224083001	Collected:	07/22/08	3 09:30	Received: 0	7/24/08 12:45	Matrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270 MSSV PAH by SIM SPE	Analytical M	ethod: EPA 8	270 by SIM F	Preparation	on Meth	od: EPA 3535			
Acenaphthene	ND	ug/L		2.0	1	07/28/08 00:00	07/30/08 03:02	2 83-32-9	
Acenaphthylene	ND	ug/L		1.5	1	07/28/08 00:00	07/30/08 03:02	2 208-96-8	
Anthracene		ug/L		0.050	1	07/28/08 00:00	07/30/08 03:02	2 120-12-7	
Benzo(a)anthracene		ug/L		0.10	1	07/28/08 00:00	07/30/08 03:02	2 56-55-3	
Benzo(a)pyrene	ND	ug/L		0.20	1	07/28/08 00:00	07/30/08 03:02	2 50-32-8	
Benzo(b)fluoranthene	ND	ug/L		0.30	1	07/28/08 00:00	07/30/08 03:02	2 205-99-2	
Benzo(g,h,i)perylene	ND	ug/L		0.20	1	07/28/08 00:00	07/30/08 03:02	2 191-24-2	
Benzo(k)fluoranthene	ND.	ug/L		0.20	1	07/28/08 00:00	07/30/08 03:02	2 207-08-9	
Chrysene		ug/L		0.10	1		07/30/08 03:02		
Dibenz(a,h)anthracene		ug/L		0.20	1		07/30/08 03:02		
Fluoranthene		ug/L		0.30	1		07/30/08 03:02		
fluorene		ug/L		0.31	1		07/30/08 03:02		
Indeno(1,2,3-cd)pyrene		ug/L		0.20	1		07/30/08 03:02		
1-Methylnaphthalene		ug/L		2.0	1		07/30/08 03:02		
2-Methylnaphthalene		ug/L		2.0	1		07/30/08 03:02		
Naphthalene		ug/L		1.5	1		07/30/08 03:02		
Phenanthrene		ug/L		0.20	1		07/30/08 03:02		
Pyrene		ug/L		0.10	1		07/30/08 03:02		
Nitrobenzene-d5 (S)	42	-	!	50-150	1		07/30/08 03:02		1g
2-Fluorobiphenyl (S)	61			50-150	1		07/30/08 03:02		. 5
[erphenyl-d14 (S)	68			50-150	1		07/30/08 03:02		
3260 MSV Low Level	Analytical M	ethod: EPA 82	260						
Benzene	ND	ug/L		1.0	1		07/29/08 13:05	5 71-43-2	
Ethylbenzene		ug/L		1.0	1		07/29/08 13:05		
Naphthalene		ug/L		1.0	1		07/29/08 13:05		
Foluene		ug/L		1.0	1		07/29/08 13:05		
m&p-Xylene		ug/L		2.0	1		07/29/08 13:05		
o-Xylene		ug/L		1.0	1		07/29/08 13:05		
1-Bromofluorobenzene (S)	97		8	87-109	1		07/29/08 13:05		
Dibromofluoromethane (S)	101			85-115	1		07/29/08 13:05		
I,2-Dichloroethane-d4 (S)	102			79-120	1		07/29/08 13:05		
Foluene-d8 (S)	99			70-120	1		07/29/08 13:05		
Sample: 280 BIRCH A	Lab ID: 9	224083002	Collected:	07/22/08	3 10:00	Received: 0	7/24/08 12:45	Matrix: Water	
Parameters	Results	Units	Report		DF	Prepared	Analyzed	CAS No.	Qua
							Analyzed	OAO NO.	
3270 MSSV PAH by SIM SPE	•		∠≀∪ by SINI F	•		od: EPA 3535	07/00/00 00 00		
Acenaphthene		ug/L		2.0	1		07/30/08 03:29		
Acenaphthylene		ug/L		1.5	1		07/30/08 03:29		
Anthracene		ug/L		0.050	1		07/30/08 03:29		
Benzo(a)anthracene		ug/L		0.10	1		07/30/08 03:29		
Benzo(a)pyrene Benzo(b)fluoranthene		ug/L		0.20	1		07/30/08 03:29		
	ND	LICI/I		0.30	1	11/728/08 OO:00	07/30/08 03:29	1 205-99-2	

Date: 07/30/2008 03:09 PM

REPORT OF LABORATORY ANALYSIS

Page 4 of 16





Appendix D Regulatory Correspondence



BOARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner

Secretary



M. David Mitchell, MD

Coleman F. Buckhouse, MD

Glenn A. McCall

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

3 September 2008

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

Re:

MCAS - Laurel Bay Housing - 281 Birch

Site ID # 04024

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.

17 December 2008

Commanding Officer

ATTN: S-4 NREAO (Craig Ehde)

MCAS

PO Box 55001

Beaufort, SC 29904-5001

Re:

MCAS - Laurel Bay Housing - 281 Birch

Site ID # 04024

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. 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

Ján 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