SUMMARY REPORT
260 DAHLIA DRIVE (FORMERLY 603 DAHLIA DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic 9324 Virginia Avenue Norfolk, Virginia 23511-3095 SUMMARY REPORT 260 DAHLIA DRIVE (FORMERLY 603 DAHLIA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

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9324 Virginia Avenue Norfolk, Virginia 23511-3095

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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Summary Report 260 Dahlia Drive (Formerly 603 Dahlia Drive) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

IDIQ Indefinite Delivery, Indefinite Quantity

IGWA Initial Groundwater Assessment

JV Joint Venture

LBMH Laurel Bay Military Housing MCAS Marine Corps Air Station

NAVFAC Mid-Lant Naval Facilities Engineering Command Mid-Atlantic

NFA No Further Action

PAH polynuclear aromatic hydrocarbon

QAPP Quality Assurance Program Plan

RBSL risk-based screening level

SCDHEC South Carolina Department of Health and Environmental Control

Site LBMH area at MCAS Beaufort, South Carolina

UST underground storage tank

VISL vapor intrusion screening level



1.0 INTRODUCTION

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

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

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 260 Dahlia Drive (Formerly 603 Dahlia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.





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

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

1.2 UST Removal and Assessment Process

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

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

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





used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 260 Dahlia Drive (Formerly 603 Dahlia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 603 Dahlia Drive* (MCAS Beaufort, 1999) and *SCDHEC UST Assessment Report – 603 Dahlia Drive* (MCAS Beaufort, 2013). The UST Assessment Reports are provided in Appendix B.

2.1 UST Removal and Soil Sampling

Two 280 gallon heating oil USTs were removed at 260 Dahlia Drive (Formerly 603 Dahlia Drive). Tank 1 was removed on September 9, 1999, from the front yard. Tank 2 was removed on May 16, 2013, from the concrete porch area. The UST locations are indicated in the figures of the UST Assessment Reports (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removals. According to the UST Assessment Reports (Appendix B), the depth to the bases of the USTs were not specified (Tank 1) and 6'0" (Tank 2) bgs and one sample was collected for each from that depth. 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 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 reports are included in the UST Assessment Reports presented in Appendix B. The laboratory analytical data reports include 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 260 Dahlia Drive (Formerly 603 Dahlia Drive) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 260 Dahlia Drive (Formerly 603 Dahlia Drive). This NFA determination was obtained in a letter dated December 14, 2016. SCDHEC's NFA letter is provided in Appendix C.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 1999. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 603 Dahlia Drive, Laurel Bay Military Housing Area, September 1999.

Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 603 Dahlia Drive, Laurel Bay Military Housing Area, October 2013.





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

Table



Table 1

Laboratory Analytical Results - Soil 260 Dahlia Drive (Formerly 603 Dahlia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 09/09/99 and 05/16/13				
		603 Dahlia -01 09/09/99	603 Dahlia -02 05/16/13			
Volatile Organic Compounds Analyze	d by EPA Method 8260B (mg/kg)					
Benzene	0.003	ND	ND			
Ethylbenzene	1.15	ND	ND			
Naphthalene	0.036	ND	ND			
Toluene	0.627	ND	ND			
Xylenes, Total	13.01	ND	ND			
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	ND	ND			
Benzo(b)fluoranthene	0.66	ND	0.0907			
Benzo(k)fluoranthene	0.66	ND	ND			
Chrysene	0.66	ND	0.0391			
Dibenz(a,h)anthracene	0.66	ND	ND			

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

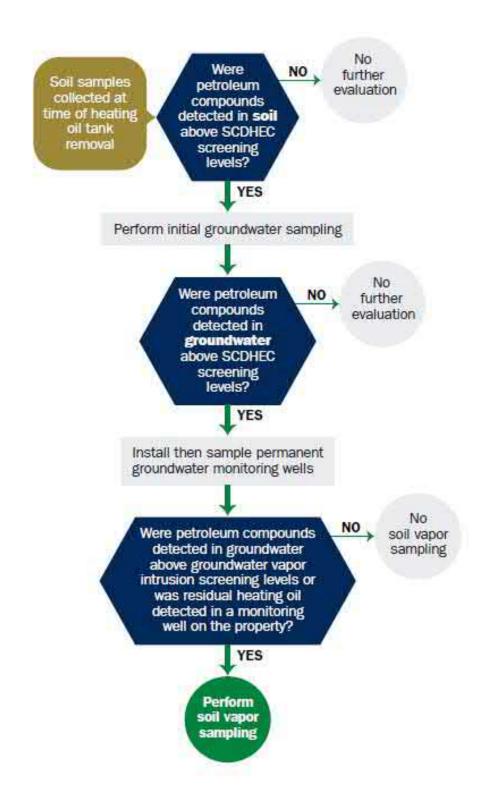
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A Multi-Media Selection Process for LBMH

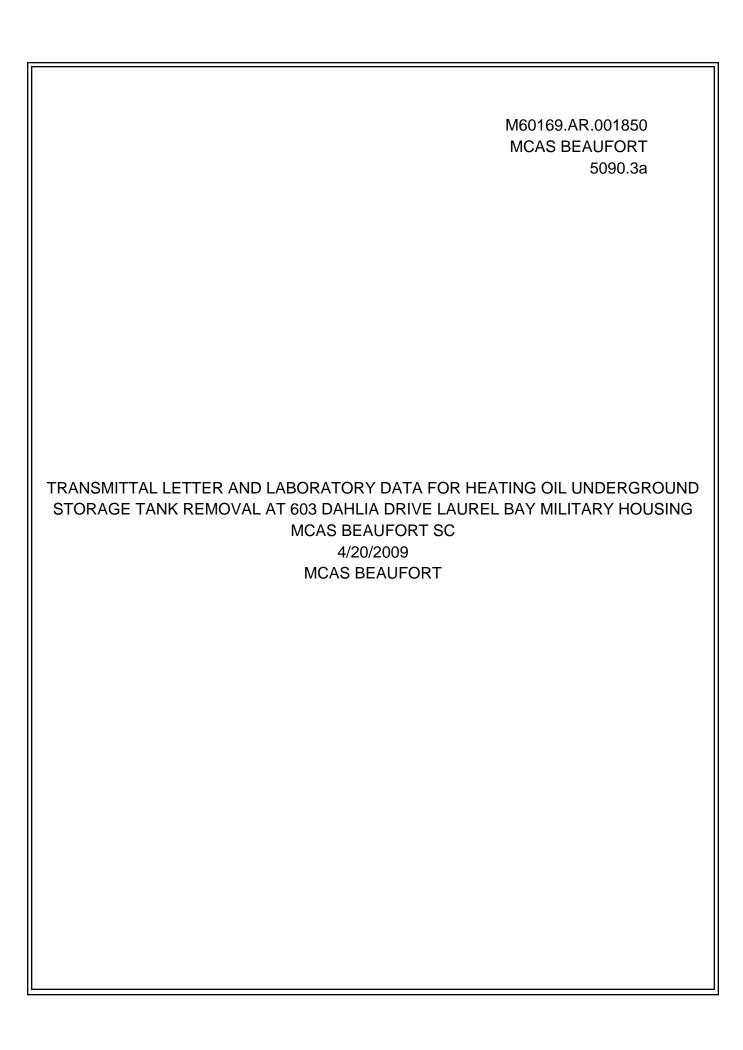




Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Reports







UNITED STATES MARINE CORPS

MARINE CORPS AIR STATION BEAUFORT, SOUTH CAROLINA 29904-5001

IN REPLY REFER TO 5900 NREAO/057 April 20, 2009

SCDHEC-BLWM

Attn: Ms. Jan T. Cooke

2600 Bull Street

Columbia, South Carolina 29201

Dear Ms. Cooke:

Subject: Heating Oil UST Removal Laboratory Data for Laurel Bay

Military Housing, Marine Corps Air Station (MCAS)

Beaufort, South Carolina

Enclosed are laboratory results for heating oil UST removals at 6 homes located in Laurel Bay Military Housing, MCAS Beaufort. The addresses for the homes included in this package are: 345 Ash, 378 Aspen, 603 Dahlia, 768 Althea, 110 Althea, and 772 Althea. Limited information is available for these tank removals as they occurred in 1999. The only information available is laboratory data and general locations of the tanks removed. One discrepancy is the report for 770 Althea. A fax that lists these tank removals indicates that 2 tanks were removed at 764 Althea and hand writing on the fax suggests that the actual address may be 766 Althea. We believe the actual house the fax and laboratory reports are referring to is 770 Althea. Three tanks were removed at 766 Althea in 1999 that required a period of ground water monitoring (SCDHEC ID# 01439). A no further action decision was rendered for the site by SCDHEC in a letter dated October 10, 2003. In addition, in the 2006 tank removal event, no tank was discovered at 770 Althea; however a tank was found and removed at 764 Althea (SCHEC ID# 03748). Again, based on this information, we believe that the actual house the enclosed fax and laboratory report is referring to is 770 Althea.

One soil sample was submitted from each tank pulled and analyzed for volatile organic compounds (VOCs) by method 8260 and for semi-volatile organic compounds by method 8270. No petroleum compounds were detected in any of the soil samples. Methylene chloride was detected in all of the samples at nearly identical levels. Given the similar levels detected and the

common occurrence of methylene chloride as a laboratory contaminant, we believe the methylene chloride detected in the soil samples is the result of laboratory contamination.

If you have any questions regarding this information please contact Craig Ehde at 843-228-7317 or craig.ehde@usmc.mil.

Sincerely,

William A Drawdy Natural Resources and

Environmental Affairs Officer

By Direction of the Commanding Officer

Enclosure: Assessment Reports for the following

residences: 345 Ash, 378 Aspen, 603 Dahlia, 768

Althea, 110 Althea, and 772 Althea.

Cc: Mr. Russell Berry, EQC Low Country District (w/o

enclosures)

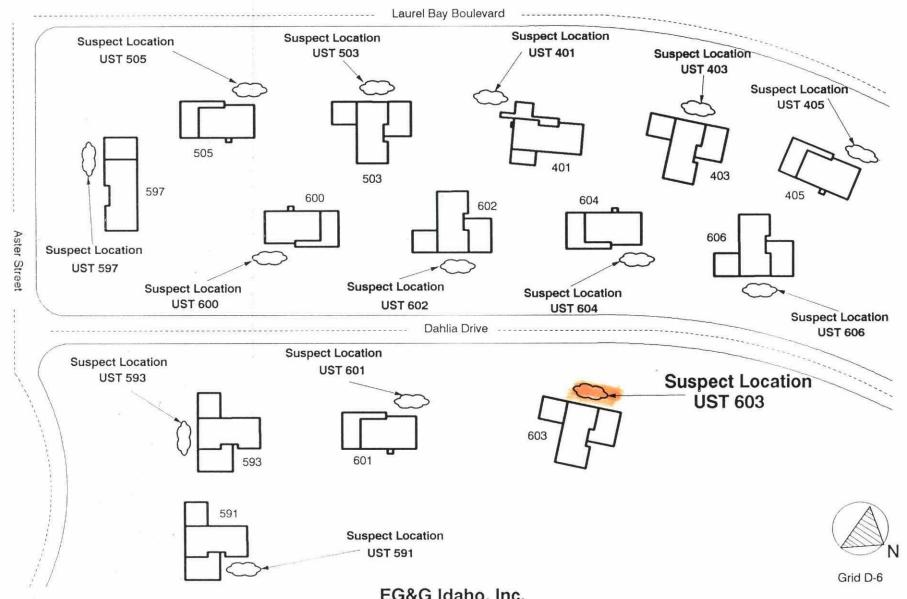
· CAY JAMES Perce IngiteTol K & G CONSTRUCTION CO. MCAS Fleld Office 584 Kimes Avenue

P.O. Box 9191 Benufort, SC 29904-9191

(843) 521-9773 Phone (843) 521-9115 Fax

	To: Jim Reeves Fax: 522-7032	
	From: Beth Date: Tucsday June 22, 1999	
	Re: Locations of tanks Pages: Lincluding cover	
	REF:	
	Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☑ For Your Info	
	DEMMENTS:	
	Following are locations where tanks have been removed:	
W. ×	378 Aspen	
	345 Ash /	
(District)	768 Althea /	
	772 Althca	
*	764 Althea (2 tanks removed)	
-	777	ئى
* 7	777 266 Cetthee Ful feleco * Par plant of permitting the permitting the permitting of permitting the permitting of permitting the permitting of permitting the permitting of permitting the permitting the permitting of permitting the permitting of permitting the permitting of permitting the permitting of permitting the permitting the permitting of permitting the permitting of permitting the pe	Ł
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		/

MCAS Beaufort **Laurel Bay Housing Area UST 603**



EG&G Idaho, Inc.

Site sketches are schematic representations indicating approximate locations and orientations.



2960 Foster Creighton Dr. P.O. Box 40566 Nashville, TN 37204-0566 Phone 1-615-726-0177

USACE-SAVANNAH DISTRICT 8995 MARK HARVISON 100 WEST OGLETHORPE AVE SAVANNAH, GA 31402

Project: DO208

Project Name: LAUREL BAY UST

Sampler: J. SMITH

ANALYTICAL REPORT

603 DAKLIA @ LIBAY

Lab Number: 99-A138228

Sample ID: 603 UST Sample Type: Soil

Site ID:

Date Collected: 9/ 9/99

Time Collected: 16:40 Date Received: 7/10/77

Time Received: 8:30

Analyte	Result	Units	Report Linit	Ruan Linit	Dil Factor	Date	Tine	Analyst	Method	Date!
	**********						4 -			
EXTRACTABLE UNGARICS										
Roenaphthene	HD	ng/kg	ũ. 3 59	0, 330	1	9/17/99	13:20	N. Goodrich	8270C	4973
Acenaphthylene	ФK	ng/kg	9.359	0.330	1	9/17/99	13:20	N. Goodrich	8270C	4973
Anthracene	AD:	ng/kg	0.359	8.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
Benzo(a)anthracene	KD OK	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270E	4973
Benzo(a)pyrene	QK	ng/kg	ባ. 35ዮ	0.330	1	9/17/99	13:20	N. Goodrich		4973
Benzo(b)Fluoranthene	MD OK	ng/kg	0.359	0,330	1	9/17/99	13:20	N. Goodrich	8270C	4973
Benzo(g,h,i)perylene	HD.	ng/kg	8.359	0.330	1	9/17/99	13:20	N. Goodrich	8270€	4973
Benzo(k)fluorantheme	ФK	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
4-Kronophenylphenylether	HD	ng/kg	0.359	0.330	1	7/17/99	13: 20	M. Goodrich	8270C	4973
Kutylbenzylphthalate	HD	ng/kg	0.359	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Carbazole	HD	ng/kg	0.359	0.330	1	9/17/99	13: 20	M. Seedrich	8270C	4973
4-Chloro-3-methylphenol	HD	ng/kg	0.359	0.330	1	9/17/99	13: 28	n. Soodrich	8276C	4973
4-Chlorosniline	ND	ng/kg	0. 359	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
bis(2-Chloroethoxy)nethane	HD	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
bis(2-Chloroethyl)ether	ЖD	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
bis(2-Chloroisopropyl)ether	HD	ng/kg	0.359	0.330	1	9/17/99	13: 20	n. Goodrich		4973
2-Chloronaphthalene	КО	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
2-Chlorophenol	KD OK	ng/kg	0.359	0.330	1	9/17/99	13:20	N. Soodrich	8270C	4973
4-Chlorophenylphenylether	Ю	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Soodrich	8270C	4973
Chrysene	סא	ng/kg	0.359	0.330	1	9/17/99	13: 20	M. Spodrich		4973
Dibenzofuran	HD	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrica	6270C	4973
Dibenz(a,h)anthracene	HD	ng/kg	0.359	0.330	1	9/17/99	13:20	n. Soodrich	8270C	4973
1,2-Dichlorobenzene	HD	ng/kg	0.359	0.330	1	9/17/99	13: 20	n. Soutrica		4973
1,3-Dichlorobenzene	но	ng/kg ng/kg	0.359	0.330	1	9/17/99	13:20		8270C	4773 4973
1,4-Dichlorobenzene	HD.	ng/kg	8. 3 5 7	0.330	1	9/17/99	13:20	N. Goodrich		
3,3'-Dichlorobenzidine	AD:	ng/kg	0.717	0.660	1	9/17/99		M. Goodrich	6270C	4973
2,4-Dichlorophenol	KD	ng/kg	0.727 0.359	0. 330	1		13:20	M. Goodrich	8270C	4973
Diethylphthalate	ND .	ng/kg	8. 359	0. 330 0. 330		9/17/99	13: 20	n. Goodrich	8270C	4973
2,4-Dinethylphenol	עה מא		•		1	9/17/99	13: 20	M. Goodrich	8270C	4973
Dinethylphthalate	XD XD	Hg/kg	0.359 0.359	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Pi-n-butylphthalate	*D	Hg/kg	0. 359 n. 359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
72-n-outgiphenalate 7,6-Dimitro-2-methylphenol		ng/kg	0.359 0.997	0.330	1.	9/17/99	13:20	M. Goodrich	8270C	4973
· ·	ND ND	ng/kg	8.897	0.825	1	9/17/99	13:20	N. Goodrich	8270C	4973
2,4-Dimitrophenol		Hg/kg	8.897	0.825	1	9/17/99	13: 20	M. Goodrich	8270C	4973
2,4-dimitrotoluene	ND OK	ng/kg	8.359 8.359	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
2,6-Dimitrotolueme	HD.	ng/kg	მ. 359	0.330	1	9/17/99	13: 28	n. Goodrich	8270C	4973



2960 Foster Creighton Dr. P.O. Box 40566 Nashville, TN 37204-0566 Phone 1-615-726-0177

ANALYTICAL

Laboratory Number: 77-A138228 Sample ID: 603 UST

Page 2

A1.6.			Report	មូតទម	DII					
Analyte 	Result	Units	Linit	Linit 	Factor	Date	Time	Analyst	Nethod	Batol
Di-n-octylphthalate	. מא	ng/kg	0. 359	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Fluorasthene	HD	ng/kg	8. 359	0. 330	1	9/17/99	13:20	n. Soodrich	8270C	4973
Fluorene	нD	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich	8270C	4973
Hexachlorobenzene	ЯD	ng/kg	0.359	0.330	1	9/17/99	13:20	N. Goodrich	8270C	4973
Hexachlorobutadiene	HD	ng/kg	0.359	0,330	1	9/17/99	13:20	M. Goodrich	8270C	4973
Hexachlerocyclopentadiene	ИD	ng/kg	0. 359	0.330	1	9/17/99	13: 20	n. Goodrich	8270C	4973
Hexachloroethane	HD	ng/kg	0. 359	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Indeno(1,2,3-cd)pyrene	D	ng/kg	0. 359	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	
Isophorone	ФK	ng/kg	0. 359	0.330	1	9/17/99	13: 20	n. Goodrich	8270C	4973 4973
2-Methylmaphthalene	AB:	ng/kg	9. 359	0.330	1	9/17/99	13:20	n. Soodrich	8270C	
2-Methylphenol	HD.	ng/kg	0.359	0.330	1	9/17/99	13:20	M. Goodrich		4973
n,p-Methylphenol	HD	Hg/kg	0.359	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Haphthalene	HD	ng/kg	0.357	8, 330	1	9/17/99	13: 20		8270C	4973
2-Nitroaniline	HD	ng/kg	0.897	0.825	1	9/17/99	13: 20	M. Soodrich	8270C	4973
3-Mitrosniline	HD	ng/kg	0.877	0.825	1	9/17/99	13: 20	M. Soodrich	8270C	4973
4-Ritrosmiline	DK	Hg/kg	0.897	0.825	1			M. Goodrick	8270C	4973
Hitrobenzene	HD	ng/kg	0. 359 x	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
2-Nitrophenol	₩Ď	ng/kg	0.357			9/17/93	13: 20	n. Goodrich	8270C	4973
4-Hitrophenol	ND	ng/kg	0.897	0.330 0.825	1	9/17/99	13:20	fi. Goodrich	8270C	4973
M-mitrosodi-m-propylamine	HD				1	9/17/99	13: 20	n. Goodrich	8270C	4973
M-mitrosodiphenylamine	ND DK	Hg/kg	9. 359	0.330	1	9/17/99	13: 20	n. Goodrich	8270C	4973
Pentachlorophenol	HD	ng/kg	0. 359 0. 007	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Phenanthrene	ND D	ng/kg	0.897	0.825	1	9/17/99	13: 20	N. Goodrich	8270C	4973
PhenoL		ng/kg	0.359	0.330	1 .	9/17/99	13:20	M. Goodrich	8270C	4973
Purene	HD HD	ng/kg	0. 359	0.330	, 1	9/17/99	13: 20	N. Goodrich	8270C	4973
~	ND ND	ng/kg	0.359	0.330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
Bis(2-ethylhexyl)phthalate	MD OK	ng/kg	0.359	0.330	1	9/17/99	13:20	N. Goodrich	8278C	4973
1,2,4-Trichlorobenzene	ND ND	ng/kg	0.359	0.330	1	9/17/99	13:20	A. Goodrich	8270C	4973
2,4,5-Trichlorophenol	פא	ng∕kg	0.897	0.825	1	9/17/99	13:20	N. Goodrich	8270C	4973
2,4,6-Trichlorophenol	DK	ng/kg	0. 359	0. 330	1	9/17/99	13: 20	M. Goodrich	8270C	4973
VOLATILE ORGANICS									,	
Acetone	0.0166	ng/kg	0.0107	0.0078	1	9/12/99	1:53	M. Cathey	6260B	5553
Acrolein	HD	tig/kg	0.0107	0.0098	1	9/12/99	1:53	M. Cathey	8260B ·	5553
Acrylonitrile	HD	ng/kg	0.0107	0.0098	1	9/12/99	1:53	M. Cathey	8260A	5553
Genzene	D	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
(ronobenzene	ЯD	ng/kg	0.0821	0.0020	1	9/12/99	1:53	N. Cathey	8260K	5553
Gronochloromethame	פא	ng/ka	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260T	5553
Granoforn ·	ФK	ng/kg	0.0021	0.0020	1	9/12/99	1:53	N. Cathey	82608	5553
Tronomethame	ВD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260Ø	5553
2-Nutanone	ע אַ	Hg/kg	0.0107	0.0098	1	9/12/99	1:53	M. Cathey	8260E	5553
n-Nutylbenzene	מא	Hg/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	3260R	5553
sec-Butylbenzene	ЯÐ	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
t-Butylbenzene	dk	H g ∕kg	8. 6021	0.0020	1	9/12/99	1:53	M. Cathey	8260R ·	5553
arbon disulfide	HD	iig/kg	0.0021	0.0020	1	9/12/99	1:53	M.Catheg	8260B	5553



2960 Foster Creighton Dr. P.O. Box 40566 Nashville, TN 37204-0566 Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A138228

Sample ID: 603 UST

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^2	.	44. 3 -	Report	Rusii	DII					
Analyte	Result	Units	Limit	Linit	Factor	Date	Tine	Analyst	Method	Katch
Carbon tetrachloride	HD	Hg/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260I	5553
Chlorobenzene	HD	Hg/kg	9.0021	0.0020	1	9/12/99	1:53	N. Cathey	8260R	3553
Chloroethane	HD	H q/ kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260D	JJJ3
2-Chloroethylvinylether	AD OK	нg/kg	0.0021	0.0020	1	9/12/99	1: 53	M. Cathey	8260N	5553
Chloroforn	עא	ng/kg	0.0021	0.0020	1	9/12/99	1:53	n. Cathey	8260B	5553
Chloromethane	AD:	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Catheu	8260B	3333
2-Chlorotoluene	AD.	ng/kg	0.8821	0.8020	1	9/12/99	1:53	M. Cathey	8260B	5553
4-Chlorotoluene	D	ng/kg	0.0021	0.0020	1	9/12/99	1:53	n. Cathey	8260R	5553
1,2-Dibromo-3-chloropropane	AD.	ng/kg	0.0107	0.0098	1	9/12/99	1:53	M. Cathey	82608	2223
Dibromochloromethame	HD:	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8268B	2223
1,2-Dibronoethane	ND:	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Catheg	826BB	5553
Dibronomethame	HD	ng/kg	0.0021	0.0028	1	9/12/99	1: 53	M. Cathey	8260N	5553
1,4-Dichloro-2-butene	HD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260R	5553
1,2-Dichlorobenzene	ND	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
1,3-Dichlorobenzene	HD OF	ng/kg	0.0021	0.0828	1.	9/12/99	1:53	M. Cathey	8260B	2223
1,4-Dichlorobenzene	ND	ng/kg	0.0021	0.0020	1	9/12/99	1:53	N. Catheu	8260B	5553
Dichlorodifluoromethame	dk	ng/kg	0.0021	0.0020	1	9/12/99	1:53	n. Cathey	8260B	5553
,1-Dichloroethane	HD	ng/kg	8.0021	0.0020	1	9/12/99	1:53	n. Cathey N. Cathey	8260R	
1,2-Dichloroethane	HD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	-		5553
1,1-Dichloroethene	HD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
cis-1.2-Dichloroethene	DK	'ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260K	5553
trans-1,2-Dichloroethene	HD	ng/kg	0.0021	0.0020	1			M. Cathey	82600	5553
1,2-Dichloropropane	КО	ng/kg	0.0021	0.0020		9/12/99	1:53	M. Cathey	8260K	5553
1,3-Dichloropropane	KD	nga kg Hg/kg	0.0021		1	9/12/99	1:53	H. Catheg	8260B	555 3
2,2-Dichloropropane	AD OH	ng/kg		0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
i,1-Dichloropropene	מא		0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260X	5553
cis-1,3-Dichloropropene	מא פא	ng/kg	9. 0021	0.0020	1	9/12/99	1:53	M. Cathey	8260R	5553
trans-1,3-Dichloropropene	HD:	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260K	5553
Ethylbenzene	ND ND	ng/kg	0.0021	0.0020	1	9/12/99	1:53	N. Cathey	82608	5553
Hexachlorobutadiene		ng/kg	0.0021	0.0020	1	9/12/99	1:53	M.Cathey	8260B	5553
5-H6X3BOB6 JGY4CUTOLODOF36TENS	OK OK	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	2223
	ND D	ng/kg	9. 0107	0.0098	1	9/12/99	1:53	M. Cathey	8260I	5553
Iodonethane	HD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	2223
Esopropylbenzene	HD HD	tig/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
1-Isopropultoluene	AD OK	ng/kg	0.0021	8.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
Methyl methacrylate	AD.	ng/kg	0.0107	0.0098	1	9/12/99	1: 53	M. Cathey	82608	5553
l-Methyl-2-pentanone	KD .	ng/kg	0.0107	0.0098	1	9/12/99	1:53	II. Cathey	8260B	5553
	0.0182	ng∕k₫	0.0107	0. 0078	1	9/12/99	1:53	H. Cathey	82600	5553
laphthalene	QK T	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
n-Propylbenzene	סא	Hg/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260R	5553
tyrene	КD	ng∕kg	0.0021	0.0020	1.	9/12/99	1:53	M. Cathey	8260B	5553
,1,1,2-Tetrachloroethane	DK	Hg/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
1,1,2,2-Tetrachloroethane	ЯD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	ii. Cathey	8260B	5553
[etrachloroethene	MD OX	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
oluene	' D	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82600	5553



2960 Foster Creighton Dr. P.O. Box 40566 Nashville, TN 37204-0566 Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A138228

Sample ID: 603 UST

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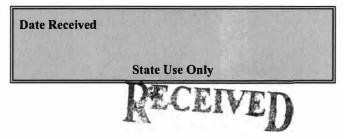
malyte	Result	Units	Report Limit	Quan Linit	011 Factor	Date	Tine	Amalyst	Method	Ratci
					~~~~~		1 7116	2007A2C	116C1900	D8C01
,2,3-Trichlorobenzene	HD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
.,2,4-Trichlorobenzene	Ф	нд/ка	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
,1,1-Trichloroethane	КD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Catheg	82608	5553
,1,2-Trichloroethane	AD .	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Catheu	8260R	5553
richloroethene	HD OH	ng/kg	0.0021	0.8020	1	9/12/99	1:53	, N. Catheg	8260B	5553
,2,3-Trichloropropane	OR	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	826DB	5553
,2,4-Trinethylbenzene	НD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260K	5553
,3,5-Trimethylbenzene	ВD	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260R	5553
ingl acetate	DK	ng/kg	9, 8107	0.0098	1	9/12/99	1:53	N. Cathen	8260A	7573
ingl chloride	HD	ng/kq	0.0021	0.0020	1	9/12/99	1:53	M. Catheu	8260B	5553
ylenes	CH :	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	2223
ronodichloromethame	D	ng/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	82608	5553
richlorofluoromethame	- ND	Hg/kg	0.0021	0.0020	1	9/12/99	1:53	M. Cathey	8260B	5553
ethyl-t-butyl ether	NO	Hg∕kg	0.0107	0.0050	1	9/12/99	1:53	M. Cathey	8260B	2223
GENERAL CHEMISTRY PARAMETI	ERS#								•	
Dry Weight	92.	Z j			1	9/16/99	11:00	A. Bufalino	CLP	1508

### Sample Extraction Data

Раганетег	Mt/Vol Extracted	Extract Vol	Date	Analyst	Method
DMA's	29.7 gн	1.8 ml	9/15/99	M. Cauthen	3550
Volatile Organics	5.1 g	5.0 ml	9/10/99	M.Hinelick	5035

Surrogate	% Recovery	Target Range		
surr-1,2-Dichloroethame, d4	110.	48 160.		
surr-Toluene 48	106.	79 119.		
surr-4-Bronofluorobenzene	112.	69 135.		
surr-Olbronofluoromethane	121.	63 135.		
surr-Hitrobenzene-d5	52.	20 110.		
surr-2-fluorobiphenyl	54.	18 110.		
surr-Terphenyl d14	73.	27 123.		
surr-Phenol d5	72.	10 111.		
surr-2-Fluorophenol	62.	10 107.		
surr-2,4,6-Tribronophenol	70.	14 110.		

### 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) 896-7957

OCT 2 3 20143

ST DHEC - Bureau of Land & Waste Management

### I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commandomer Name (Corporation, Indiana)	nding Officer Attn: NR lividual, Public Agency, Other)	EAO (Craig Ehde)
P.O. Box 55001 Mailing Address		
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

### II. SITE IDENTIFICATION AND LOCATION

Permit I.D. # Laurel Bay Militar Facility Name or Company S	ry Housing Area, Site Identifier	Marine Cor	ps Air	Station,	Beaufort,	SC_
603 Dahlia Drive, Street Address or State Road		ary Housin	g Area			
Beaufort,	Beaufort					
City	County					

Attachment 2

#### III. INSURANCE INFORMATION

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

	. Gas, Kerosene)	Heatin		-
	. Gas, Kerosene)	Heatin		
Capacity(ex			ig oil	
	x. 1k, 2k)	280 ga	1	
Age		Late 1	950s	
Construction	Material(ex. Steel, FI	RP)		
Month/Year	of Last Use	Mid 19	980s	
Depth (ft.) Te	o Base of Tank	6'		
Spill Prevent	ion Equipment Y/N.	No		
Overfill Prev	ention Equipment Y	/N		
Method of C	losure Removed/Fille	edRemove	ed	
Date Tanks F	Removed/Filled	5/16/20	013	
Visible Corre	osion or Pitting Y/N.	Yes		
Visible Holes	s Y/N	Yes		
		moved from the ground (a		
	Dahlia was remov achment "A".	ed from the groun	d, cleaned and	recycled.

### VII. PIPING INFORMATION

		Steel	
Construction Material	(ex. Steel, FRP)	& Copper	
Distance from UST to	Dispenser	N/A	
Number of Dispensers		N/A	
Type of System Pressi	ure or Suction	Suction	
Was Piping Removed	from the Ground? Y/N	No	
Visible Corrosion or F	Pitting Y/N	Yes	
Visible Holes Y/N		No	
Age		Late 1950s	
	pitting were foun	describe the location and exte	
	according to the contract of t		
	supply and return	imes were sound.	_
	supply and return	lines were sound.	
pipe. Copper :	BRIEF SITE DESCI	RIPTION AND HISTOR	
pipe. Copper :  VIII. The USTs at th	BRIEF SITE DESCI	RIPTION AND HISTOR	wall steel
VIII. The USTs at the	BRIEF SITE DESCR Le residences are contained fuel oil	RIPTION AND HISTOR	wall steel STs were
VIII. The USTs at the	BRIEF SITE DESCR Le residences are contained fuel oil	RIPTION AND HISTOR constructed of single for heating. These U	wall steel STs were
VIII. The USTs at the	BRIEF SITE DESCR Le residences are contained fuel oil	RIPTION AND HISTOR constructed of single for heating. These U	wall steel STs were
VIII. The USTs at the	BRIEF SITE DESCR Le residences are contained fuel oil	RIPTION AND HISTOR constructed of single for heating. These U	wall steel STs were

### IX. SITE CONDITIONS

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

### X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
603 Dahlia	Excav at fill end	Soil	Sandy	6'	5/16/13 1415 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

^{* =} Depth Below the Surrounding Land Surface

### XI. SAMPLING METHODOLOGY

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

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

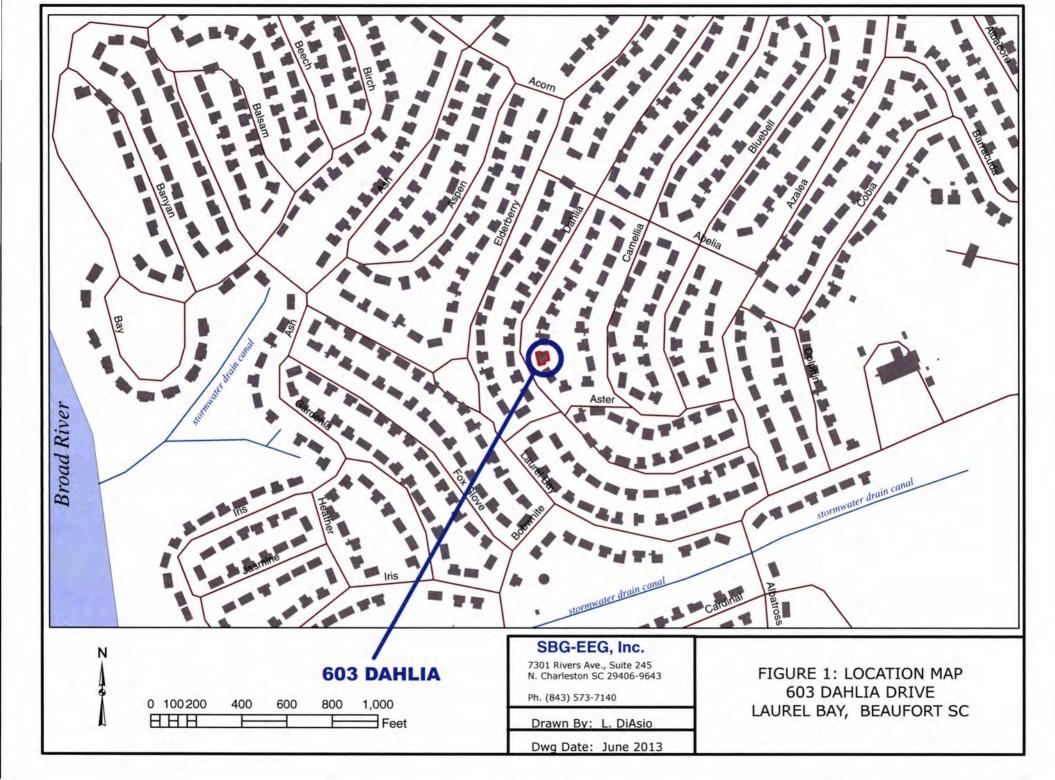
### XII. RECEPTORS

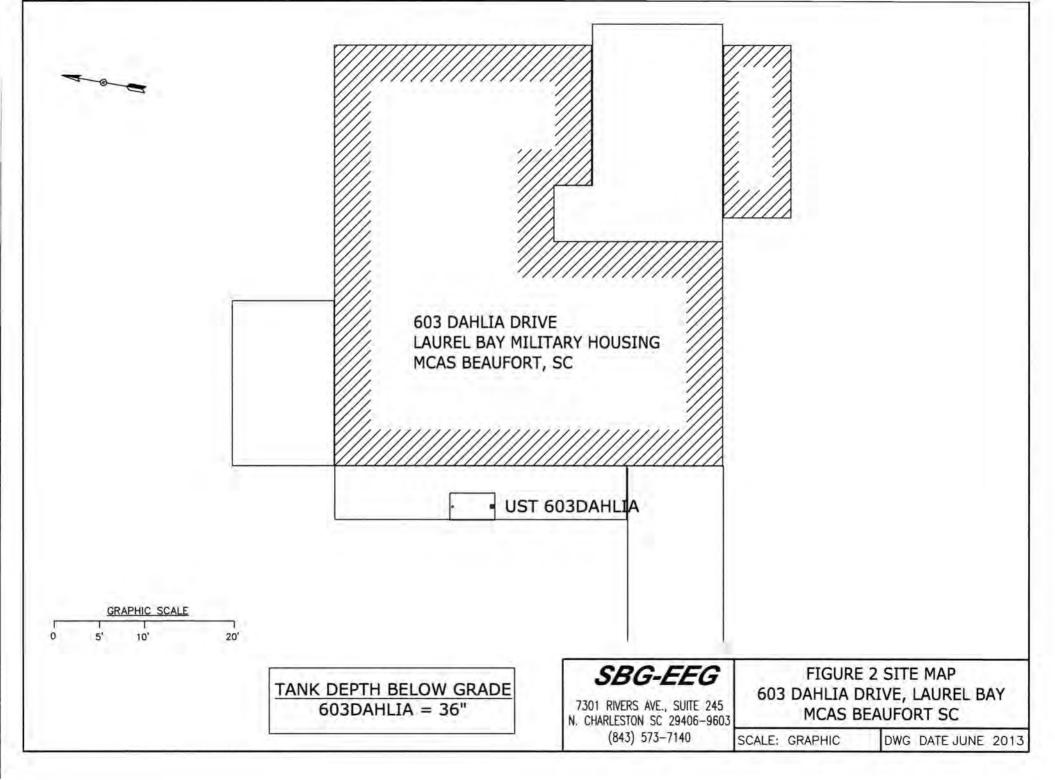
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		Х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?  *Sewer, water, electricicable, fiber optic & geo	200	naì
	If yes, indicate the type of utility, distance, and direction on the site map.	CHCI	
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		х
	If yes, indicate the area of contaminated soil on the site map.		

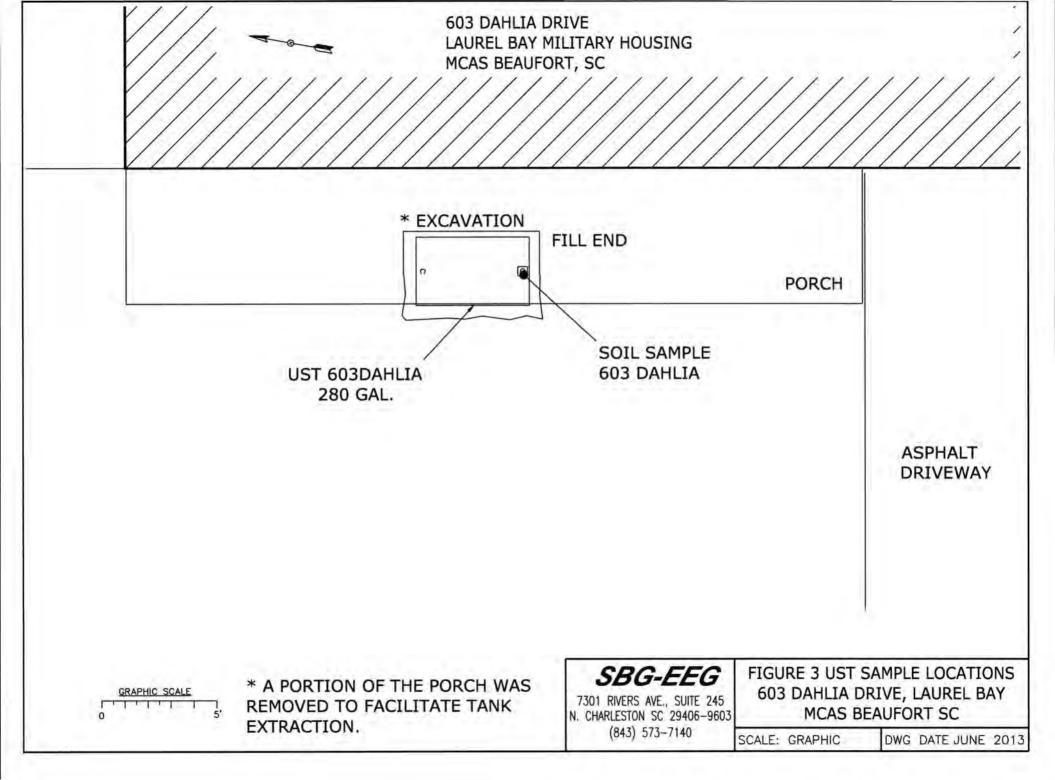
### XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 603Dahlia.



Picture 2: UST 603Dahlia excavation in progress.



Picture 3: UST 603Dahlia excavation.



Picture 4: UST 603Dahlia excavation.

## XIV. SUMMARY OF ANALYSIS RESULTS

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

CoC UST	603Dahlia		
Benzene	ND		
Toluene	ND		
Ethylbenzene	ND		
Xylenes	ND		
Naphthalene	ND		
Benzo (a) anthracene	ND		
Benzo (b) fluoranthene	0.0907 mg/kg		
Benzo (k) fluoranthene	ND		
Chrysene	0.0391 mg/kg		
Dibenz (a, h) anthracene	ND		
TPH (EPA 3550)			
CoC			
Benzene	1		
Toluene			
Ethylbenzene			
Xylenes			
Naphthalene			
Benzo (a) anthracene			
Benzo (b) fluoranthene			
Benzo (k) fluoranthene			
Chrysene			
Dibenz (a, h) anthracene			
Disone (a, n) antinacono			

SUMMARY OF ANALYSIS RESULTS (cont'd)

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

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

## XV. ANALYTICAL RESULTS

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

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



# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 490-27307-1 Client Project/Site: Laurel Bay Site

For:

Small Business Group Inc. 10179 Highway 78 Ladson, South Carolina 29456

Attn: Tom McElwee

Authorized for release by: 6/6/2013 3:03:49 PM

Kuth Hay

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

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

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

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

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Method Summary	
Certification Summary	
Chain of Custody	
Receipt Checklists	

## **Sample Summary**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-27307-1	1464 Cardinal	Solid	05/14/13 15:15	05/23/13 08:30
490-27307-2	1403 Eagle	Solid	05/15/13 15:00	05/23/13 08:30
490-27307-3	603 Dahlia	Solid	05/16/13 14:15	05/23/13 08:30

#### **Case Narrative**

TestAmerica Job ID: 490-27307-1

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Client: Small Business Group Inc. Project/Site: Laurel Bay Site

Job ID: 490-27307-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-27307-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/23/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

#### GC/MS VOA

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 1403 Eagle (490-27307-2).

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 1403 Eagle (490-27307-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 1403 Eagle (490-27307-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

#### GC/MS Semi VOA

Method(s) 8270C, 8270D: The matrix spike duplicate (MSD) percent recoveries and %RPD for batch 81594 were outside control limits for Naphthalene. This is attributed to matrix interferences. The laboratory control sample (LCS) was within control limits, so re-extraction and re-analysis was not needed.

No other analytical or quality issues were noted.

#### **Organic Prep**

No analytical or quality issues were noted.

#### **VOA Prep**

No analytical or quality issues were noted.

## **Definitions/Glossary**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

#### Qualifiers

#### GC/MS VOA

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

#### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

#### Glossary

TEF

TEQ

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

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

### **Client Sample Results**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

Lab Sample ID: 490-27307-1

Client Sample ID: 1464 Cardinal

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

Date Collected: 05/14/13 15:15 Date Received: 05/23/13 08:30 Matrix: Solid

Percent Solids: 85.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00222	0.000744	mg/Kg	**	05/23/13 17:00	05/28/13 15:21	1
Ethylbenzene	ND		0.00222	0.000744	mg/Kg	***	05/23/13 17:00	05/28/13 15:21	1
Naphthalene	ND		0.00555	0.00189	mg/Kg	-23	05/23/13 17:00	05/28/13 15:21	1
Toluene	ND		0.00222	0.000822	mg/Kg	-	05/23/13 17:00	05/28/13 15:21	1
Xylenes, Total	ND		0.00555	0.000744	mg/Kg	0	05/23/13 17:00	05/28/13 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				05/23/13 17:00	05/28/13 15:21	1
4-Bromofluorobenzene (Surr)	99		70 - 130				05/23/13 17:00	05/28/13 15:21	1
Dibromofluoromethane (Surr)	101		70 - 130				05/23/13 17:00	05/28/13 15:21	1
Toluene-d8 (Surr)	100		70 - 130				05/23/13 17:00	05/28/13 15:21	1
Method: 8270D - Semivolatile	Company of the Compan		5)						
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0766	0.0114	mg/Kg	0	05/24/13 06:55	05/25/13 03:46	1
Acenaphthylene	ND		0.0766	0.0103	mg/Kg	***	05/24/13 06:55	05/25/13 03:46	1
Anthracene	ND		0.0766	0.0103	mg/Kg	-53	05/24/13 06:55	05/25/13 03:46	1
Benzo[a]anthracene	ND		0.0766	0.0172	mg/Kg	**	05/24/13 06:55	05/25/13 03:46	1
Benzo[a]pyrene	ND		0.0766	0.0137	mg/Kg	**	05/24/13 06:55	05/25/13 03:46	1
Benzo[b]fluoranthene	ND		0.0766	0.0137	mg/Kg	**	05/24/13 06:55	05/25/13 03:46	1
Benzo[g,h,i]perylene	ND		0.0766	0.0103	mg/Kg	100	05/24/13 06:55	05/25/13 03:46	1
Benzo[k]fluoranthene	ND		0.0766	0.0160	mg/Kg	0	05/24/13 06:55	05/25/13 03:46	1
1-Methylnaphthalene	ND		0.0766	0.0160	mg/Kg	0	05/24/13 06:55	05/25/13 03:46	1
	ND								
Pyrene	ND		0.0766	0.0137	mg/Kg	*	05/24/13 06:55	05/25/13 03:46	1
Pyrene Phenanthrene			0.0766 0.0766	0.0137 0.0103	0 0	0	05/24/13 06:55 05/24/13 06:55	05/25/13 03:46 05/25/13 03:46	1
	ND								1 1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79	29 - 120	05/24/13 06:55	05/25/13 03:46	1
Terphenyl-d14 (Surr)	101	13 - 120	05/24/13 06:55	05/25/13 03:46	1
Nitrobenzene-d5 (Surr)	84	27 - 120	05/24/13 06:55	05/25/13 03:46	1

0.0766

0.0766

0.0766

0.0766

0.0766

ND

ND

ND

ND

0.0103 mg/Kg

0.0137 mg/Kg

0.0114 mg/Kg

0.0103 mg/Kg

0.0183 mg/Kg

05/24/13 06:55

05/24/13 06:55

05/24/13 06:55

05/24/13 06:55

05/24/13 06:55

05/25/13 03:46

05/25/13 03:46

05/25/13 03:46

05/25/13 03:46

05/25/13 03:46

	74	
Genera	Chem	istry

Fluoranthene

Naphthalene

Indeno[1,2,3-cd]pyrene

2-Methylnaphthalene

Fluorene

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10	0.10	%			05/24/13 08:49	1

## **Client Sample Results**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

Client Sample ID: 1403 Eagle

Date Collected: 05/15/13 15:00

**Percent Solids** 

Lab Sample ID: 490-27307-2

Matrix: Solid

Date Received: 05/23/13 08:30							Percent Soli	ds: 74.8	
Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00237	0.000795	mg/Kg	0	05/23/13 17:00	05/28/13 16:15	1
Ethylbenzene	0.00748		0.00237	0.000795	mg/Kg	章	05/23/13 17:00	05/28/13 16:15	1
Naphthalene	ND		0.476	0.162	mg/Kg	**	05/23/13 16:56	05/28/13 16:42	1
Toluene	0.00164	J	0.00237	0.000879	mg/Kg	ø	05/23/13 17:00	05/28/13 16:15	1
Xylenes, Total	0.0319		0.00594	0.000795	mg/Kg	0	05/23/13 17:00	05/28/13 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				05/23/13 17:00	05/28/13 16:15	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				05/23/13 16:56	05/28/13 16:42	1
4-Bromofluorobenzene (Surr)	176	X	70 - 130				05/23/13 17:00	05/28/13 16:15	1
4-Bromofluorobenzene (Surr)	106		70 - 130				05/23/13 16:56	05/28/13 16:42	1
Dibromofluoromethane (Surr)	105		70 - 130				05/23/13 17:00	05/28/13 16:15	1
Dibromofluoromethane (Surr)	96		70 - 130				05/23/13 16:56	05/28/13 16:42	1
Toluene-d8 (Surr)	104		70 - 130				05/23/13 17:00	05/28/13 16:15	1
Toluene-d8 (Surr)	101		70 - 130				05/23/13 16:56	05/28/13 16:42	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.639		0.0887	0.0132	mg/Kg	*	05/24/13 06:55	05/25/13 04:09	1
Acenaphthylene	ND		0.0887	0.0119	mg/Kg	*	05/24/13 06:55	05/25/13 04:09	-1
Anthracene	0.139		0.0887	0.0119	mg/Kg	\$	05/24/13 06:55	05/25/13 04:09	1
Benzo[a]anthracene	0.116		0.0887	0.0199	mg/Kg	**	05/24/13 06:55	05/25/13 04:09	1
Benzo[a]pyrene	0.0795	J	0.0887	0.0159	mg/Kg	0	05/24/13 06:55	05/25/13 04:09	1
Benzo[b]fluoranthene	0.149		0.0887	0.0159	mg/Kg	0	05/24/13 06:55	05/25/13 04:09	1
Benzo[g,h,i]perylene	ND		0.0887	0.0119	mg/Kg	- 🜣	05/24/13 06:55	05/25/13 04:09	1
Benzo[k]fluoranthene	0.0644	J	0.0887	0.0185	mg/Kg	0	05/24/13 06:55	05/25/13 04:09	1
1-Methylnaphthalene	2.60		0.0887	0.0185	mg/Kg	**	05/24/13 06:55	05/25/13 04:09	1
Pyrene	1.42		0.0887	0.0159	mg/Kg	ø	05/24/13 06:55	05/25/13 04:09	1
Phenanthrene	0.434		0.0887	0.0119	mg/Kg	*	05/24/13 06:55	05/25/13 04:09	1
Chrysene	0.205		0.0887	0.0119	mg/Kg	ø	05/24/13 06:55	05/25/13 04:09	1
Dibenz(a,h)anthracene	ND		0.0887	0.00927	mg/Kg	*	05/24/13 06:55	05/25/13 04:09	1
Fluoranthene	0.401		0.0887	0.0119	mg/Kg	٥	05/24/13 06:55	05/25/13 04:09	1
Fluorene	1.08		0.0887	0.0159	mg/Kg	*	05/24/13 06:55	05/25/13 04:09	1
Indeno[1,2,3-cd]pyrene	ND		0.0887	0.0132	mg/Kg	**	05/24/13 06:55	05/25/13 04:09	-1
Naphthalene	ND		0.0887	0.0119	mg/Kg	\$	05/24/13 06:55	05/25/13 04:09	1
2-Methylnaphthalene	1.07		0.0887	0.0212	mg/Kg	**	05/24/13 06:55	05/25/13 04:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	87		29 - 120				05/24/13 06:55	05/25/13 04:09	1
Terphenyl-d14 (Surr)	108		13 - 120				05/24/13 06:55	05/25/13 04:09	1
Nitrobenzene-d5 (Surr)	82		27 - 120				05/24/13 06:55	05/25/13 04:09	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

05/24/13 08:49

0.10

0.10 %

## **Client Sample Results**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

Client Sample ID: 603 Dahlia

Date Collected: 05/16/13 14:15 Date Received: 05/23/13 08:30

Analyte

**Percent Solids** 

Lab Sample ID: 490-27307-3

Matrix: Solid

Percent Solids: 94.6

ate received. 00/20/10 00:00								r creent bon	us. 54.0
Method: 8260B - Volatile Orga	anic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00223	0.000748	mg/Kg	-02	05/23/13 17:00	05/28/13 15:48	1
Ethylbenzene	ND		0.00223	0.000748	mg/Kg	<	05/23/13 17:00	05/28/13 15:48	1
Naphthalene	ND		0.00558	0.00190	mg/Kg	0	05/23/13 17:00	05/28/13 15:48	1
Toluene	ND		0.00223	0.000827	mg/Kg	42	05/23/13 17:00	05/28/13 15:48	1
Xylenes, Total	ND		0.00558	0.000748	mg/Kg	0	05/23/13 17:00	05/28/13 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130				05/23/13 17:00	05/28/13 15:48	1
4-Bromofluorobenzene (Surr)	112		70 - 130				05/23/13 17:00	05/28/13 15:48	1
Dibromofluoromethane (Surr)	102		70 - 130				05/23/13 17:00	05/28/13 15:48	1
Toluene-d8 (Surr)	102		70 - 130				05/23/13 17:00	05/28/13 15:48	1
Method: 8270D - Semivolatile	Organic Compou	inds (GC/MS	3)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0696	0.0104	mg/Kg	**	05/24/13 06:55	05/25/13 02:37	1
Acenaphthylene	ND		0.0696	0.00934	mg/Kg	43	05/24/13 06:55	05/25/13 02:37	1
Anthracene	ND		0.0696	0.00934	mg/Kg	10	05/24/13 06:55	05/25/13 02:37	1
Benzo[a]anthracene	ND		0.0696	0.0156	mg/Kg	0	05/24/13 06:55	05/25/13 02:37	1
Benzo[a]pyrene	0.200		0.0696	0.0125	mg/Kg	42	05/24/13 06:55	05/25/13 02:37	1
Benzo[b]fluoranthene	0.0907		0.0696	0.0125	mg/Kg	ø	05/24/13 06:55	05/25/13 02:37	1
Benzo[g,h,i]perylene	0.0823		0.0696	0.00934	mg/Kg	ø	05/24/13 06:55	05/25/13 02:37	1
Benzo[k]fluoranthene	ND		0.0696	0.0145	mg/Kg	0	05/24/13 06:55	05/25/13 02:37	1
1-Methylnaphthalene	ND		0.0696	0.0145	mg/Kg	0	05/24/13 06:55	05/25/13 02:37	1
Pyrene	0.0797		0.0696	0.0125	mg/Kg	12	05/24/13 06:55	05/25/13 02:37	1
Phenanthrene	ND		0.0696	0.00934	mg/Kg	43	05/24/13 06:55	05/25/13 02:37	1
Chrysene	0.0391	J	0.0696	0.00934	mg/Kg	**	05/24/13 06:55	05/25/13 02:37	1
Dibenz(a,h)anthracene	ND		0.0696	0.00727	mg/Kg	-	05/24/13 06:55	05/25/13 02:37	1
Fluoranthene	ND		0.0696	0.00934	mg/Kg	**	05/24/13 06:55	05/25/13 02:37	1
Fluorene	ND		0.0696	0.0125	mg/Kg	0	05/24/13 06:55	05/25/13 02:37	1
Indeno[1,2,3-cd]pyrene	0.0741		0.0696	0.0104	mg/Kg	ø	05/24/13 06:55	05/25/13 02:37	1
Naphthalene	ND		0.0696	0.00934	mg/Kg		05/24/13 06:55	05/25/13 02:37	1
2-Methylnaphthalene	ND		0.0696	0.0166	mg/Kg	0	05/24/13 06:55	05/25/13 02:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	76		29 - 120				05/24/13 06:55	05/25/13 02:37	1
Terphenyl-d14 (Surr)	97		13 - 120				05/24/13 06:55	05/25/13 02:37	1
Nitrobenzene-d5 (Surr)	79		27 - 120				05/24/13 06:55	05/25/13 02:37	1
General Chemistry									
A CONTRACTOR OF THE PARTY OF TH	D	0	DI.	-	11.74		Databased	Amelioned	DU F

Analyzed

05/24/13 08:49

Dil Fac

RL

0.10

RL Unit

0.10 %

D

Prepared

Result Qualifier

95

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

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

Lab Sample ID: 490-27047-C-4-D MS

Matrix: Solid

Analysis Batch: 82155

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

Prep Batch: 80593

27.4	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		0.0586	0.05736		mg/Kg	0	98	31 - 143
Ethylbenzene	ND		0.0586	0.05871		mg/Kg	45	100	23 - 161
Naphthalene	ND		0.0586	0.04106		mg/Kg	0	70	10 - 176
Toluene	ND		0.0586	0.05816		mg/Kg	0	99	30 - 155
Xylenes, Total	ND		0.176	0.1759		mg/Kg	0	100	25 - 162

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: 490-27047-C-4-E MSD

Matrix: Solid

Analysis Batch: 82155

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 80593

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0737	0.06470		mg/Kg	0	88	31 - 143	12	50
Ethylbenzene	ND		0.0737	0.06423		mg/Kg	**	87	23 - 161	9	50
Naphthalene	ND		0.0737	0.04632		mg/Kg	*	63	10 - 176	12	50
Toluene	ND		0.0737	0.06547		mg/Kg	0	89	30 - 155	12	50
Xylenes, Total	ND		0.221	0.1910		mg/Kg	*	86	25 - 162	8	50

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: MB 490-82155/6

Matrix: Solid

Analysis Batch: 82155

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0335	mg/Kg			05/28/13 12:32	1
Ethylbenzene	ND		0.100	0.0335	mg/Kg			05/28/13 12:32	1
Naphthalene	ND		0.250	0.0850	mg/Kg			05/28/13 12:32	1
Toluene	ND		0.100	0.0370	mg/Kg			05/28/13 12:32	1
Xylenes, Total	ND		0.250	0.0335	mg/Kg			05/28/13 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		05/28/13 12:32	1
4-Bromofluorobenzene (Surr)	101		70 - 130		05/28/13 12:32	1
Dibromofluoromethane (Surr)	99		70 - 130		05/28/13 12:32	1
Toluene-d8 (Surr)	97		70 - 130		05/28/13 12:32	1

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

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

Lab Sample ID: MB 490-82155/7

Matrix: Solid

Analysis Batch: 82155

Client Sample ID: Method Blank

Prep Type: Total/NA

	MD	MID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			05/28/13 12:59	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			05/28/13 12:59	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			05/28/13 12:59	1
Toluene	ND		0.00200	0.000740	mg/Kg			05/28/13 12:59	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			05/28/13 12:59	1
	MR	MR							

Dil Fac Surrogate Limits Prepared Analyzed %Recovery Qualifier 1,2-Dichloroethane-d4 (Surr) 98 70 - 130 05/28/13 12:59 70 - 130 4-Bromofluorobenzene (Surr) 100 05/28/13 12:59 Dibromofluoromethane (Surr) 100 70 - 130 05/28/13 12:59 Toluene-d8 (Surr) 100 70 - 130 05/28/13 12:59

Lab Sample ID: LCS 490-82155/3

Matrix: Solid

Analysis Batch: 82155

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

Analysis Baton, 52155	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.04954		mg/Kg		99	75 - 127
Ethylbenzene	0.0500	0.05202		mg/Kg		104	80 - 134
Naphthalene	0.0500	0.05264		mg/Kg		105	69 - 150
Toluene	0.0500	0.05154		mg/Kg		103	80 - 132
Xylenes, Total	0.150	0.1569		mg/Kg		105	80 - 137

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 490-82155/4

Matrix: Solid

Analysis Batch: 82155

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.04671		mg/Kg		93	75 - 127	6	50
Ethylbenzene	0.0500	0.04886		mg/Kg		98	80 - 134	6	50
Naphthalene	0.0500	0.05059		mg/Kg		101	69 - 150	4	50
Toluene	0.0500	0.04893		mg/Kg		98	80 - 132	5	50
Xylenes, Total	0.150	0.1485		mg/Kg		99	80 - 137	6	50

LCSD	LCSD	
%Recovery	Qualifier	Limits
98		70 - 130
101		70 - 130
101		70 - 130
101		70 - 130
	%Recovery 98 101 101	101 101

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

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

Lab Sample ID: MB 490-81594/1-A

Matrix: Solid

Analysis Batch: 81747

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

Prep Batch: 81594

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Anthracene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Pyrene	ND		0.0670	0.0120	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Chrysene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Fluorene	ND		0.0670	0.0120	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		05/24/13 06:55	05/25/13 02:14	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		05/24/13 06:55	05/25/13 02:14	1

	1110 1110				
Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	80	29 - 120	05/24/13 06:55	05/25/13 02:14	1
Terphenyl-d14 (Surr)	106	13 - 120	05/24/13 06:55	05/25/13 02:14	1
Nitrobenzene-d5 (Surr)	84	27 - 120	05/24/13 06:55	05/25/13 02:14	1

Lab Sample ID: LCS 490-81594/2-A

Matrix: Solid

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 81594

Analysis Batch: 81747	Spike	LCS	LCS				%Rec.	+
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	
Acenaphthylene	1.67	1.535		mg/Kg	7.7	92	38 - 120	
Anthracene	1.67	1.556		mg/Kg		93	46 - 124	
Benzo[a]anthracene	1.67	1.470		mg/Kg		88	45 - 120	
Benzo[a]pyrene	1.67	1.515		mg/Kg		91	45 - 120	
Benzo[b]fluoranthene	1.67	1.597		mg/Kg		96	42 - 120	
Benzo[g,h,i]perylene	1.67	1.511		mg/Kg		91	38 - 120	
Benzo[k]fluoranthene	1.67	1.391		mg/Kg		83	42 - 120	
1-Methylnaphthalene	1.67	1.300		mg/Kg		78	32 - 120	
Pyrene	1.67	1.512		mg/Kg		91	43 - 120	
Phenanthrene	1.67	1.460		mg/Kg		88	45 - 120	
Chrysene	1.67	1.455		mg/Kg		87	43 - 120	
Dibenz(a,h)anthracene	1.67	1.524		mg/Kg		91	32 - 128	
Fluoranthene	1.67	1.549		mg/Kg		93	46 - 120	
Fluorene	1.67	1.468		mg/Kg		88	42 - 120	
Indeno[1,2,3-cd]pyrene	1.67	1.511		mg/Kg		91	41 - 121	
Naphthalene	1.67	1.226		mg/Kg		74	32 - 120	
2-Methylnaphthalene	1.67	1.279		mg/Kg		77	28 - 120	

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

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

Lab Sample ID: LCS 490-81594/2-A

Matrix: Solid

Analysis Batch: 81747

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

Prep Batch: 81594

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	81		29 - 120
Terphenyl-d14 (Surr)	100		13 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120

Lab Sample ID: 490-27307-3 MS

Matrix: Solid

Analysis Batch: 81747

Client Sample ID: 603 Dahlia Prep Type: Total/NA

Prep Batch: 81594

Analysis Batch. 01747				•••					rieb
		Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		1.76	1.360		mg/Kg	O	77	25 - 120
Anthracene	ND		1.76	1.384		mg/Kg	章	79	28 - 125
Benzo[a]anthracene	ND		1.76	1.306		mg/Kg	-02	74	23 - 120
Benzo[a]pyrene	0.200		1.76	1.343		mg/Kg	-02-	65	15 - 128
Benzo[b]fluoranthene	0.0907		1.76	1.430		mg/Kg	益	76	12 - 133
Benzo[g,h,i]perylene	0.0823		1.76	1.356		mg/Kg	章	73	22 - 120
Benzo[k]fluoranthene	ND		1.76	1.254		mg/Kg	Ø.	71	28 - 120
1-Methylnaphthalene	ND		1.76	1.138		mg/Kg	303	65	10 - 120
Pyrene	0.0797		1.76	1.445		mg/Kg	\$	78	20 - 123
Phenanthrene	ND		1.76	1.301		mg/Kg	∅.	74	21 - 122
Chrysene	0.0391	J	1.76	1.283		mg/Kg	\$	71	20 - 120
Dibenz(a,h)anthracene	ND		1.76	1.347		mg/Kg	\$	77	12 - 128
Fluoranthene	ND		1.76	1.378		mg/Kg	₩.	78	10 - 143
Fluorene	ND		1.76	1.293		mg/Kg	*	74	20 - 120
Indeno[1,2,3-cd]pyrene	0.0741		1.76	1.338		mg/Kg	章	72	22 - 121
Naphthalene	ND		1.76	1.116		mg/Kg	0	64	10 - 120
2-Methylnaphthalene	ND		1.76	1,156		mg/Kg	*	66	13 - 120

MS MS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	71		29 - 120
Terphenyl-d14 (Surr)	90		13 - 120
Nitrobenzene-d5 (Surr)	67		27 - 120

Lab Sample ID: 490-27307-3 MSD

Matrix: Solid

Analysis Batch: 81747

Client Sample ID: 603 Dahlia Prep Type: Total/NA

Pren Batch: 81594

Analysis Batch: 81/4/									Prep	Batch:	81594
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		1.73	1.327		mg/Kg	\$	77	25 - 120	2	50
Anthracene	ND		1.73	1.273		mg/Kg	*	74	28 - 125	8	49
Benzo[a]anthracene	ND		1.73	1.221		mg/Kg	*	71	23 - 120	7	50
Benzo[a]pyrene	0.200		1.73	1.250		mg/Kg	*	61	15 - 128	7	50
Benzo[b]fluoranthene	0.0907		1.73	1.310		mg/Kg	0	71	12 - 133	9	50
Benzo[g,h,i]perylene	0.0823		1.73	1.258		mg/Kg	100	68	22 - 120	8	50
Benzo[k]fluoranthene	ND		1.73	1.213		mg/Kg	Ø	70	28 - 120	3	45
1-Methylnaphthalene	ND		1.73	1.170		mg/Kg	0	68	10 - 120	3	50
Pyrene	0.0797		1.73	1.343		mg/Kg	0	73	20 - 123	7	50
Phenanthrene	ND		1.73	1.219		mg/Kg	30	71	21 - 122	7	50
Chrysene	0.0391	J	1.73	1.260		mg/Kg	*	71	20 - 120	2	49

Client: Small Business Group Inc.

Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

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

Lab Sample ID: 490-27307-3 MSD

Matrix: Solid

Analysis Batch: 81747

Client Sample ID: 603 Dahlia Prep Type: Total/NA

Prep Batch: 81594

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz(a,h)anthracene	ND		1.73	1.255		mg/Kg	*	73	12 - 128	7	50
Fluoranthene	ND		1.73	1.295		mg/Kg		75	10 - 143	6	50
Fluorene	ND		1.73	1.258		mg/Kg	*	73	20 - 120	3	50
Indeno[1,2,3-cd]pyrene	0.0741		1.73	1.255		mg/Kg		68	22 - 121	6	50
Naphthalene	ND		1.73	0.03588	JF	mg/Kg	*	2	10 - 120	188	50
2-Methylnaphthalene	ND		1.73	1.169		mg/Kg	*	68	13 - 120	1	50

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	74		29 - 120
Terphenyl-d14 (Surr)	88		13 - 120
Nitrobenzene-d5 (Surr)	71		27 - 120

#### Method: Moisture - Percent Moisture

Lab Sample ID: 490-27263-E-1 DU

Matrix: Solid

Analysis Batch: 81636

Client	Sample	ID: Du	plicate
	Prep 1	ype: T	otal/NA

Analysis Buton. 01000								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	79		78		%		2	20

## **QC Association Summary**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

#### GC/MS VOA

ı	D	r	e	n	Ì	B	a	t	c	h	÷	8	n	5	9	3

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27047-C-4-D MS	Matrix Spike	Total/NA	Solid	5035	
490-27047-C-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Prep Batch: 81551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27307-2	1403 Fagle	Total/NA	Solid	5035	

#### Prep Batch: 81556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27307-1	1464 Cardinal	Total/NA	Solid	5035	
490-27307-2	1403 Eagle	Total/NA	Solid	5035	
490-27307-3	603 Dahlia	Total/NA	Solid	5035	

#### Analysis Batch: 82155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27047-C-4-D MS	Matrix Spike	Total/NA	Solid	8260B	80593
490-27047-C-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	80593
490-27307-1	1464 Cardinal	Total/NA	Solid	8260B	81556
490-27307-2	1403 Eagle	Total/NA	Solid	8260B	81556
490-27307-2	1403 Eagle	Total/NA	Solid	8260B	81551
490-27307-3	603 Dahlia	Total/NA	Solid	8260B	81556
LCS 490-82155/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-82155/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-82155/6	Method Blank	Total/NA	Solid	8260B	
MB 490-82155/7	Method Blank	Total/NA	Solid	8260B	

## GC/MS Semi VOA

#### Prep Batch: 81594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27307-1	1464 Cardinal	Total/NA	Solid	3550C	
490-27307-2	1403 Eagle	Total/NA	Solid	3550C	
490-27307-3	603 Dahlia	Total/NA	Solid	3550C	
490-27307-3 MS	603 Dahlia	Total/NA	Solid	3550C	
490-27307-3 MSD	603 Dahlia	Total/NA	Solid	3550C	
LCS 490-81594/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-81594/1-A	Method Blank	Total/NA	Solid	3550C	

#### Analysis Batch: 81747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-27307-1	1464 Cardinal	Total/NA	Solid	8270D	81594
490-27307-2	1403 Eagle	Total/NA	Solid	8270D	81594
490-27307-3	603 Dahlia	Total/NA	Solid	8270D	81594
490-27307-3 MS	603 Dahlia	Total/NA	Solid	8270D	81594
490-27307-3 MSD	603 Dahlia	Total/NA	Solid	8270D	81594
LCS 490-81594/2-A	Lab Control Sample	Total/NA	Solid	8270D	81594
MB 490-81594/1-A	Method Blank	Total/NA	Solid	8270D	81594

## **QC Association Summary**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

## **General Chemistry**

#### Analysis Batch: 81636

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Duplicate	Total/NA	Solid	Moisture	
1464 Cardinal	Total/NA	Solid	Moisture	
1403 Eagle	Total/NA	Solid	Moisture	
603 Dahlia	Total/NA	Solid	Moisture	
	Duplicate 1464 Cardinal 1403 Eagle	Duplicate Total/NA 1464 Cardinal Total/NA 1403 Eagle Total/NA	Duplicate         Total/NA         Solid           1464 Cardinal         Total/NA         Solid           1403 Eagle         Total/NA         Solid	DuplicateTotal/NASolidMoisture1464 CardinalTotal/NASolidMoisture1403 EagleTotal/NASolidMoisture

#### **Lab Chronicle**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site TestAmerica Job ID: 490-27307-1

Client Sample ID: 1464 Cardinal

Date Collected: 05/14/13 15:15 Date Received: 05/23/13 08:30 Lab Sample ID: 490-27307-1

Matrix: Solid

Percent Solids: 85.5

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	5035			81556	05/23/13 17:00	ML	TAL NSH	
Total/NA	Analysis	8260B		1	82155	05/28/13 15:21	МН	TAL NSH	
Total/NA	Prep	3550C			81594	05/24/13 06:55	JP	TAL NSH	
Total/NA	Analysis	8270D		1	81747	05/25/13 03:46	JS	TAL NSH	
Total/NA	Analysis	Moisture		1	81636	05/24/13 08:49	RS	TAL NSH	

Client Sample ID: 1403 Eagle

Date Collected: 05/15/13 15:00

Date Received: 05/23/13 08:30

Lab Sample ID: 490-27307-2

Matrix: Solid

Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			81556	05/23/13 17:00	ML	TAL NSH
Total/NA	Analysis	8260B		1	82155	05/28/13 16:15	МН	TAL NSH
Total/NA	Prep	5035			81551	05/23/13 16:56	ML	TAL NSH
Total/NA	Analysis	8260B		1	82155	05/28/13 16:42	МН	TAL NSH
Total/NA	Prep	3550C			81594	05/24/13 06:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	81747	05/25/13 04:09	JS	TAL NSH
Total/NA	Analysis	Moisture		1	81636	05/24/13 08:49	RS	TAL NSH

Client Sample ID: 603 Dahlia

Date Collected: 05/16/13 14:15

Date Received: 05/23/13 08:30

Lab Sample ID: 490-27307-3

Matrix: Solid

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035		-	81556	05/23/13 17:00	ML	TAL NSH
Total/NA	Analysis	8260B		1	82155	05/28/13 15:48	МН	TAL NSH
Total/NA	Prep	3550C			81594	05/24/13 06:55	JP	TAL NSH
Total/NA	Analysis	8270D		1	81747	05/25/13 02:37	JS	TAL NSH
Total/NA	Analysis	Moisture		1	81636	05/24/13 08:49	RS	TAL NSH

#### **Laboratory References:**

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

## **Method Summary**

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

TestAmerica Job ID: 490-27307-1

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

#### Protocol References:

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

TestAmerica Job ID: 490-27307-1

Client: Small Business Group Inc. Project/Site: Laurel Bay Site

#### Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
Ilinois	NELAP	5	200010	12-09-13
owa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
ouisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
JSDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

^{*} Expired certification is currently pending renewal and is considered valid.



#### COOLER RECEIPT FORM

## Charleston



Cooler Received/Opened On 5/23/2013 @ 0830					
1.	Tracki	ng #	1763	(last 4 digits, FedEx)	
Co	urior	FodEv	IR Gun ID 94	660220	

2.	. Temperature of rep. sample or temp blank when opened: 0	Degrees Celsius	
3.	. If Item #2 temperature is 0°C or less, was the representative samp	le or temp blank frozen?	YES NO.
4.	Were custody seals on outside of cooler?  If yes, how many and where: (4) Front / Buck		<b>€</b> \$NON
5.	i. Were the seals intact, signed, and dated correctly?		ES NON
6.	. Were custody papers inside cooler?		ESPNON
10	certify that I opened the cooler and answered questions 1-6 (intial)		(W)
7.	. Were custody seals on containers:	and Intact	YESNO
	Were these signed and dated correctly?		YESNO
8.	Packing mat'l used? Rubblewrap Plastic bag Peanuts Vermicu	ulite Foam Insert Paper	Other None
9.	Cooling process: (Ce) Ice-pack Ice (	direct contact) Dry ice	Other Nor

10.	Did all containers arrive in good condition (unbroken)?	ESNONA
11.	Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12.	Did all container labels and tags agree with custody papers?	ESNONA

13a. Were VOA vials received?	ESNONA
b. Was there any observable headspace present in any VOA vial?	YESNO(A)

14. Was there a Trip Blank in this cooler?	YESO.NA	If multiple coolers, sequence #_	
I certify that I unloaded the cooler and answer	ered questions 7-14	(intial)	00

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO NA

b. Did the bottle labels indicate that the correct preservatives were used	(ES).NONA

16. Was residual chlorine present?	YESNONA	

17. Were custody papers properly filled out (ink, signed, etc)?	ÆŠ)NONA

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

16. Did you sign the custody papers in the appropriate place?	ESJ.NONA
19. Were correct containers used for the analysis requested?	ESNONA

20. Was sufficient amount of sample sent in each container?	(ES)NONA

I certify that I entered this project into LIMS and answered questions 17-20 (intial)		
	-	
I certify that I attached a label with the unique LIMS number to each container (intial)	(W)	

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

Ps/03

Loc: 490 27307

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

THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN 37204

Client Name/Account #: EEG - SBG # 2449

Sampler Name: (Print)_

ChrisTunshall

Telephone Number: 843,412,2097

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

City/State/Zip: Ladson, SC 29456 Address: 10179 Highway 78 estAmerica

Nashville Division

Toll Free: 800-765-0980 Fax: 615-726-3404 Phone: 615-726-0177 Site State: SC Enforcement Action? Yes_ řes No No

PO# 550

Fax No.: 843-879-040 Drinking Wate Matrix Sludge Soil Other (specify): TA Quote #: Project ID: Laurel Bay Housing Project Project #: BTEX + Napth - 8260 PAH - 8270D Analyze For. ۲ RUSH TAT (Pre-Schedule Standard TAT Fax Results

Sample ID / Description Special Instructions: Sampler Signature: 5/15/13 114 Date Sampled B 1500 Time Sampled 0900 No. of Containers Shipped 5 Time Received by TestAmerica: Received by: water It rubus Composite RAPX Field Filtered Method of Shipment: HNO₃ (Red Label) NaOH (Orange Label) H₂SO₄ Plastic (Yellow Label) H₂SO₄ Glass(Yellow Label) NIC Other (Specify) Martha 533.13 Date Date FEDEX 0830 Time Time Laboratory Comments: Temperature Upon Receipt 0.8c VOCs Free of Headspace? 4 z Send QC with report

6/6/2013

					0830	5-23-13	S	war X mulus			7
					Time	Date		Received by TestAmerica:	Time	/ Date/	Relinquished by:
					ā	Can a		LKGK.	0900	7/22/13	remindustred by:
Z	~		space?	VOCs Free of Headspace?		FEDEX	ent:	Method of Shipment:	-	-	1111
			Receipt 0-8	Laboratory Comments: Temperature Upon Receipt 0-8							Special Instructions:
/	$\int$										,
			1								
				1							
					1						
										`	/
-		w			XX	×	بع	l	XS	116/13 1415	603 Daklin 51
Fax Results Send QC with report	RUSH TAT (Pre-Schedu Standard TAT				BTEX + Napth - 826	Drinking Water Sludge Soil Other (specify):	H ₂ SO ₄ Glass(Yellow Label)  None (Black Label)  Other ( Specify)  Groundwater  Wastewater	Composite Field Filtered Ice HNO ₃ (Red Label) Hell (Eluo babel) NaOH ( Orange Label) H ₂ SO ₄ Plastic (Yellow Label)	No. of Containers Shippe Grab	Date Sampled Time Sampled	Sample ID / Description
	le		Or.	Analyze For.	0	Matrix	n	reservative	a l	7	
					Project #:		10,		K	PILL	Sampler Signature:
				Project ID: Laurel Bay Housing Project	Project ID:		/	AL	134	PRATT	Sampler Name: (Print)
					TA Quote #:	12	360-38	Fax No.: 843		112.2097	Telephone Number: 843.412.2097
				1035	PO#:	+			ee@eeginc.r	McElwee email: mcelw	Project Manager: Tom McElwee email: mcelwee@eeginc.net
					Site State: SC	L				on, SC 29456	City/State/Zip: Ladson, SC 29456
	No.	Yes	Enforcement Action?	Enforce						9 Highway 78	Address: 10179 Highway 78
	No	Yes	Compliance Monitoring?	Complian						- SBG # 2449	Client Name/Account #: EEG - SBG # 2449
			oper analytical conducted for	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?			Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404		Nashville Division 2960 Foster Creighton Nashville, TN 37204		THE LEADER IN ENVIRONMENTAL TESTING
6/		>								•	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

PS 2012

27307 #1 A

6/6/2013

## Login Sample Receipt Checklist

Client: Small Business Group Inc.

Job Number: 490-27307-1

Login Number: 27307

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

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

## ATTACHMENT A

# **UST Certificate of Disposal**

## CONTRACTOR

Small Business Group, Inc. 10179 Highway 78 Ladson, SC 29456

TEL (843) 879-0403 FAX (843) 879-0401

## **TANK ID & LOCATION**

UST 603Dahlia; 603 Dahlia Drive, Laurel Bay Housing Area, MCAS Beaufort, S.C.

## **DISPOSAL LOCATION**

Coastal Auto Salvage Co., Inc. 130 Laurel Bay Road Beaufort, S.C. 29906

SIZE (GAL)
280

## CLEANING/DISPOSAL METHOD

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

## **DISPOSAL CERTIFICATION**

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

(Name) (Date)

## Appendix C Regulatory Correspondence





December 14, 2016

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

RE: No Further Action

Laurel Bay Underground Storage Tank Assessment Reports

Dear Mr. Drawdy:

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

The Department has reviewed the referenced assessment reports and agrees there is no indication of soil or groundwater contamination on these properties and therefore no further investigation is required at this time.

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

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

Sincerely,

Laurel Petrus, Environmental Engineer Associate

RCRA Federal Facilities Section

MRK

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

Bryan Beck, NAVFAC MIDATLANTIC (via email)

Craig Ehde (via email)

Attachment to: Petrus to Drawdy
Subject: No Further Action
Dated December 14, 2016

## Laurel Bay Underground Assessment Reports for (5 addresses/9 tanks)

No Further Action recommendation:	
255 Beech Tank 1	770 Althea Tank 1
255 Beech Tank 2	770 Althea Tank 2
345 Ash Tank 1	772 Althea Tank 1
345 Ash Tank 2	772 Althea Tank 2
603 Dahlia	