SUMMARY REPORT
398 WEST LAUREL BAY BOULEVARD (FORMERLY 517 WEST LAUREL BAY
BOULEVARD)
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:



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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 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard). 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 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 517 West Laurel Bay Boulevard* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On March 4, 2013, a single 280 gallon heating oil UST was removed from underneath the front concrete porch at 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report



(Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'1" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

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

2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On December 1, 2015, a temporary monitoring well was installed at 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST



Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – November and December 2015* (Resolution Consultants, 2016).

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

2.4 Groundwater Analytical Results

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

The groundwater results collected from 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 398 West Laurel Bay Boulevard (Formerly 517 West Laurel Bay Boulevard). This NFA determination was obtained in a letter dated June 8, 2016. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 517 West Laurel Bay Boulevard, Laurel Bay Military Housing Area, June 2013.

Resolution Consultants, 2016. Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay



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

Tables



Table 1

Laboratory Analytical Results - Soil 398 West Laurel Bay Blvd. (Formerly 517 West Laurel Bay Blvd.)

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

| Constituent | SCDHEC RBSLs (1) | Results Sample Collected 03/04/13 | | | | | | |
|---|-------------------------------------|-----------------------------------|--|--|--|--|--|--|
| Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg) | | | | | | | | |
| Benzene | 0.003 | ND | | | | | | |
| Ethylbenzene | 1.15 | ND | | | | | | |
| Naphthalene | 0.036 | ND | | | | | | |
| Toluene | 0.627 | ND | | | | | | |
| Xylenes, Total | 13.01 | ND | | | | | | |
| Semivolatile Organic Compounds A | nalyzed by EPA Method 8270D (mg/kg) | | | | | | | |
| Benzo(a)anthracene | 0.66 | 0.660 | | | | | | |
| Benzo(b)fluoranthene | 0.66 | 0.675 | | | | | | |
| Benzo(k)fluoranthene | 0.66 | 0.335 | | | | | | |
| Chrysene | 0.66 | 0.673 | | | | | | |
| Dibenz(a,h)anthracene | 0.66 | 0.047 | | | | | | |

Notes:

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

⁽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).

Table 2

Laboratory Analytical Results - Groundwater 398 West Laurel Bay Blvd. (Formerly 517 West Laurel Bay Blvd.)

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 12/01/15 | | | | | |
|--|--|---|--------------------------------------|--|--|--|--|--|
| Volatile Organic Compounds Analyzed 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 | Semivolatile Organic Compounds Analyzed by EPA Method 8270D (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

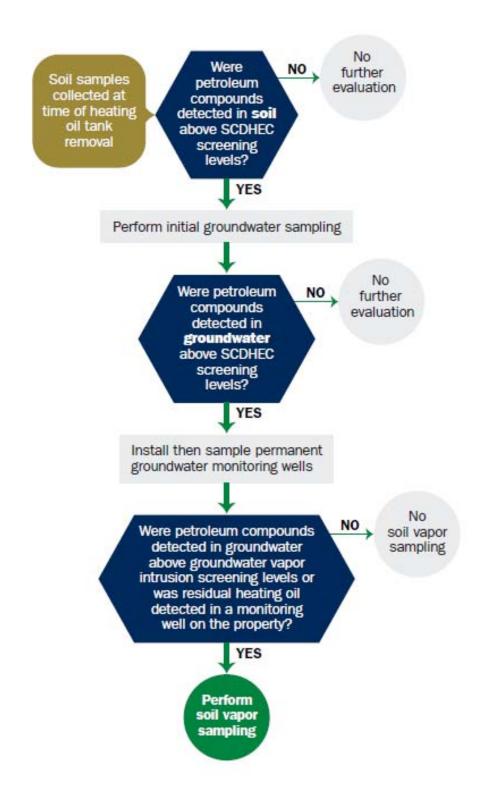
VISL - Vapor Intrusion Screening Level

⁽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) 896-7957

I. OWNERSHIP OF UST (S)

| | manding Officer Attn: NI | REAO (Craig Ehde) |
|-----------------|-----------------------------------|-------------------|
| P.O. Box 55001 | Individual, Public Agency, Other) | |
| 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 Military Housing Area, Marine Corps Air Station, Beaufort, SC |
| Facility Name or Company Site Identifier |
| 517 Laurel Bay Blvd., Laurel Bay Military Housing Area |
| Street Address or State Road (as applicable) |
| Beaufort, Beaufort |
| City County |
| |

Attachment 2

III. INSURANCE INFORMATION

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

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VII. PIPING INFORMATION

| | LaurelBB |
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| | |
| | Steel |
| Construction Material(ex. Steel, FRP) | & Copper |
| Distance from UST to Dispenser | N/A |
| Number of Dispensers | N/A |
| Type of System Pressure or Suction | Suction |
| Was Piping Removed from the Ground? Y/N | No |
| Visible Corrosion or Pitting Y/N | Yes |
| Visible Holes Y/N | No |
| Age | Late 1950s |
| If any corrosion, pitting, or holes were observed, of Corrosion and pitting were found | l on the surface of the steel ver |
| | |
| pipe. Copper supply and return l | ines were sound. |
| pipe. Copper supply and return] | ines were sound. |
| pipe. Copper supply and return] | ines were sound. |
| viii. BRIEF SITE DESCR | IPTION AND HISTORY |
| VIII. BRIEF SITE DESCR | IPTION AND HISTORY onstructed of single wall steel |
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| VIII. BRIEF SITE DESCR The USTs at the residences are co | IPTION AND HISTORY onstructed of single wall steel for heating. These USTs were |

IX. SITE CONDITIONS

| | Yes | No | Unk |
|--|-----|----|-----|
| A. Were any petroleum-stained or contaminated soils found in the US? excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map. | Γ | х | |
| 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.) | | 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# |
|-----------------|----------|-----------------------------|--------------------------|--------|----------------------------|--------------|------|
| 517 LaurelBy | Excav at | Soil | Sandy | 6'1" | 3/4/13 1340 hrs | P. Shaw | |
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^{* =} Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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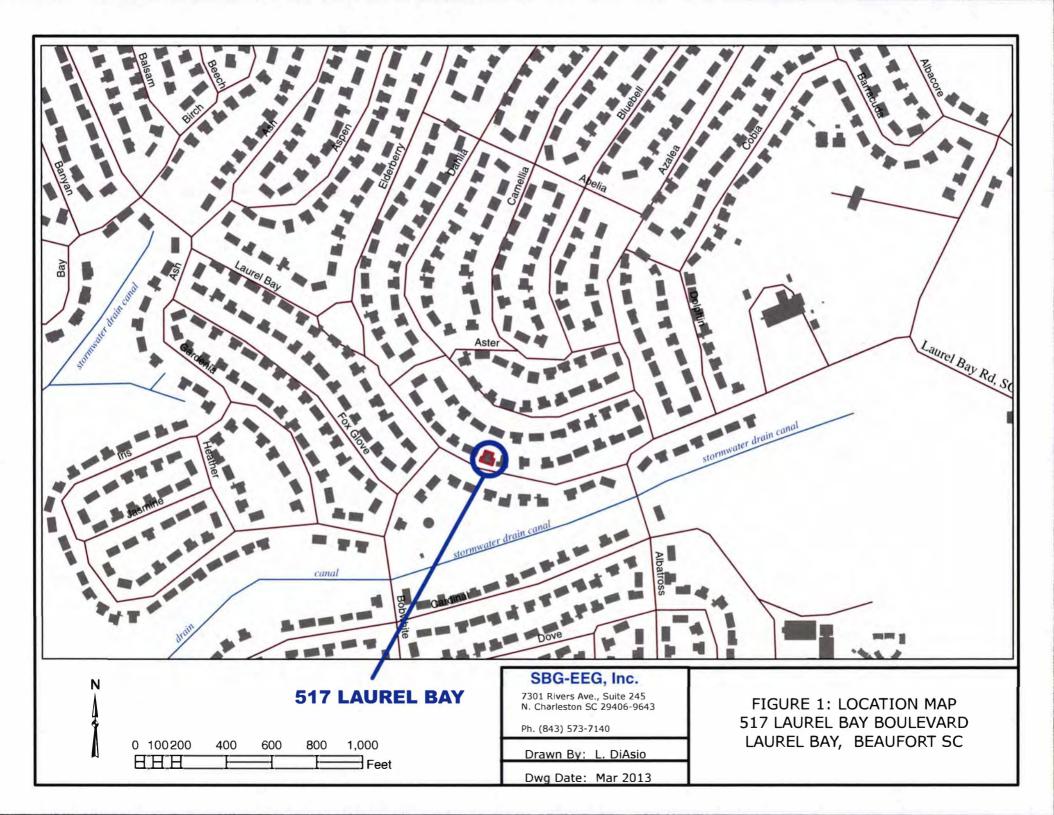
XII. RECEPTORS

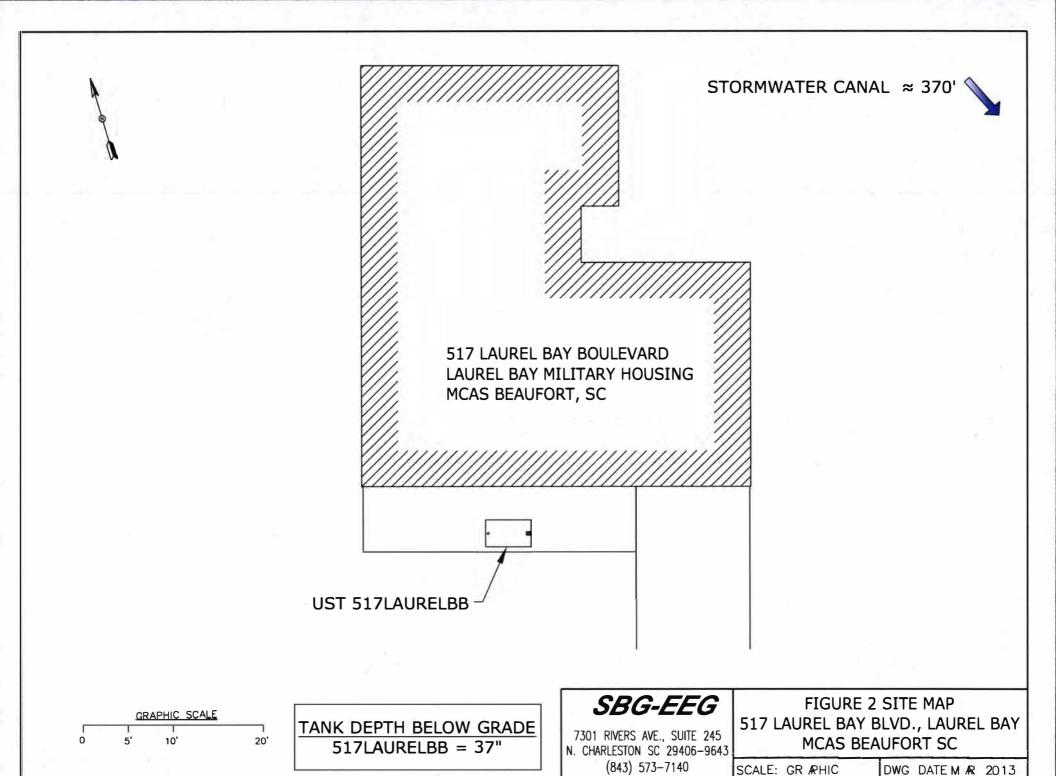
| | | Yes | No |
|----|--|-------|------|
| A. | Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? | *X | |
| | *Stormwater drainage ca | nal | |
| | If yes, indicate type of receptor, distance, and direction on site map. | | |
| В. | Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? | | Х |
| | If yes, indicate type of well, distance, and direction on site map. | | |
| C. | Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? | | Х |
| | If yes, indicate type of structure, distance, and direction on site map. | | |
| D. | Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the | *X | |
| ľ | contamination? *Sewer, water, electri | - | |
| | cable, fiber optic & of If yes, indicate the type of utility, distance, and direction on the site map. | eothe | rmal |
| | | | |
| 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. | | |

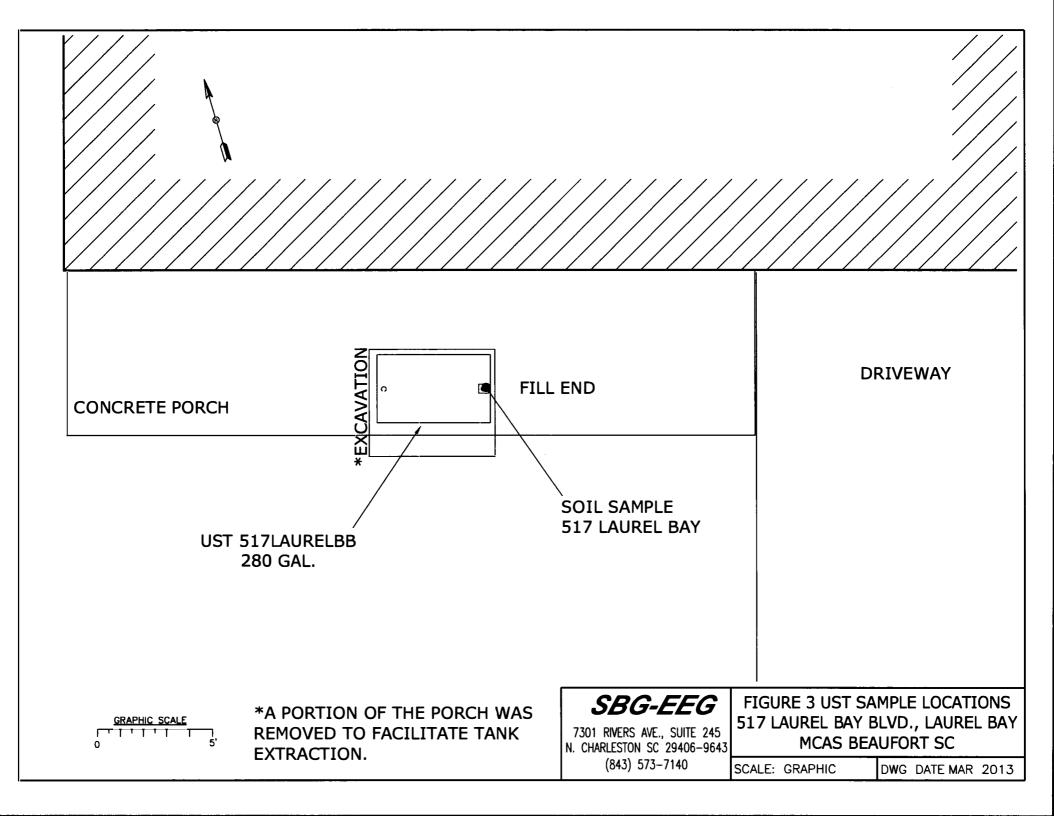
XIII. SITE MAP

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 517LaurelBB.



Picture 2: UST 517LaurelBB 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.

| | | === | | | Т | T |
|--------------------------|--------------|-----|---|-------------|-------|---|
| CoC UST | 517LaurelBB | | | | | |
| Benzene | ND | | | | | |
| Toluene | ND. | | | | | |
| Ethylbenzene | ND | | | | | |
| Xylenes | ND | | _ | | | |
| Naphthalene | ND | | | | | |
| Benzo (a) anthracene | 0.660 mg/kg | | | | • | |
| Benzo (b) fluoranthene | 0.675 mg/kg | | | | | |
| Benzo (k) fluoranthene | 0.335 mg/kg | | | | | |
| Chrysene | 0.673 mg/kg | *** | | | | |
| Ofbenz (a, h) anthracene | 0.0474 mg/kg | | | | | |
| TPH (EPA 3550) | | | | | | |
| | | | | | | |
| СоС | | | | | | |
| Benzene | | | | | | |
| Toluene | | | | | | |
| Ethylbenzene | | | | | | |
| Xylenes | | | | | | |
| Naphthalene | | | | | | |
| Benzo (a) anthracene | | | | | | |
| Benzo (b) fluoranthene | | | | | | |
| Benzo (k) fluoranthene | | | | | | |
| Chrysene | | | | | | |
| Dibenz (a, h) anthracene | | | | | | |
| TPH (EPA 3550) | | | | | | |

SUMMARY OF ANALYSIS RESULTS (cont'd)
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

| | | is present, indicate the measured thickness to the hearest 0.01 feet. | | | | | |
|--------------------------|------------------|---|-----|----------|------|--|--|
| СоС | RBSL | W-1 | W-2 | W -3 | W -4 | | |
| | (µg/I) | | | | | | |
| Free Product | None | | | <u> </u> | | | |
| 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)

Visit us at:

www.testamericainc.com

<u>TestAmerica</u>

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: 490-21055-1

TestAmerica Sample Delivery Group: 1063 Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Hay

Authorized for release by: 3/14/2013 11:34:05 AM

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

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Sample Summary

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

| | _ | |
|---|---|--|
| | | |
| | 9 | |
| | | |
| | _ | |
| 4 | | |

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|---------------------|--------|----------------|----------------|
| 490-21055-1 | 832 Azalea | Solid | 02/27/13 13:25 | 03/06/13 08:15 |
| 490-21055-2 | 529 Laurel Bay Blvd | Solid | 02/28/13 13:35 | 03/06/13 08:15 |
| 490-21055-3 | 490 Laurel Bay | Solid | 03/01/13 13:45 | 03/06/13 08:15 |
| 490-21055-4 | 517 Laurel Bay | Solid | 03/04/13 13:40 | 03/06/13 08:15 |
| 490-21055-5 | 523 Laurel Bay | Solid | 02/28/13 14:30 | 03/06/13 08:15 |
| 490-21055-6 | 415 Elberberry | Solid | 03/01/13 14:30 | 03/06/13 08:15 |
| 490-21055-7 | 503 Laurel Bay | Solid | 03/04/13 14:45 | 03/06/13 08:15 |

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Case Narrative

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Job ID: 490-21055-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-21055-1

Comments

No additional comments.

Receipt

The samples were received on 3/6/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.1° C.

GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 64361. See LCS/LCSD

Method(s) 8260B: The continuing calibration verification (CCV) for vinyl chloride, dichlorofluoromethane, and bromomethane associated with batch 64361 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 64361 exceeded control limits for the following analytes: 1,1-dichloropropene, 1,1-dichloroethene, trans-1,2-dichloroethene, and 1,1-dichloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample(s): 517 Laurel Bay (490-21055-4).

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: 517 Laurel Bay (490-21055-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The following sample(s) was diluted due to the nature of the sample matrix: 517 Laurel Bay (490-21055-4). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description** Х

Surrogate is outside control limits

Relative error ratio

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

GC/MS Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Glossary

RER

RL

RPD TEF

TEQ

| 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 |

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 832 Azalea

Date Collected: 02/27/13 13:25 Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-1

Matrix: Solid

Percent Solids: 87.3

| Analyte | nic Compounds (| Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------------|-----------|----------|----------|-------|----|----------------|----------------|---------|
| Benzene | ND | Qualifier | 0.00271 | 0.000908 | | ## | 03/07/13 10:22 | 03/12/13 02:03 | Dii Tuk |
| Ethylbenzene | ND | | 0.00271 | | mg/Kg | Ħ | 03/07/13 10:22 | 03/12/13 02:03 | |
| Naphthalene | ND. | | 0.00271 | 0.000300 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 02:03 | |
| Toluene | ND. | | 0.00076 | 0.00230 | | n | 03/07/13 10:22 | 03/12/13 02:03 | 100 |
| | ND. | | 0.00271 | 0.000100 | | Ħ | 03/07/13 10:22 | 03/12/13 02:03 | |
| Xylenes, Total | ND | | 0.00078 | 0.000908 | mg/kg | | 03/07/13 10.22 | 03/12/13 02.03 | |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fa |
| 1, 2-Dichloroethane-d4 (Surr) | 103 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:03 | |
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:03 | 9 |
| Dibromofluoromethane (Surr) | 106 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:03 | 3 |
| Toluene-d8 (Surr) | 93 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:03 | |
| Method: 8270D - Semivolatile | | • | • | | | | | | |
| Analyte | | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
| Acenaphthene | ND | | 0.0756 | 0.0113 | 0 0 | Ħ | 03/07/13 09:51 | 03/07/13 19:44 | 1 |
| Acenaphthylene | ND | | 0.0756 | 0.0101 | | ä | 03/07/13 09:51 | 03/07/13 19:44 | |
| Anthracene | ND | | 0.0756 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Benzo[a]anthracene | ND | | 0.0756 | 0.0169 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Benzo[a]pyrene | ND | | 0.0756 | 0.0135 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | 1 |
| Benzo[b]fluoranthene | ND | | 0.0756 | 0.0135 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Benzo[g,h,i]perylene | ND | | 0.0756 | 0.0101 | mg/Kg | Œ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Benzo[k]fluoranthene | ND | | 0.0756 | 0.0158 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| 1-Methylnaphthalene | ND | | 0.0756 | 0.0158 | mg/Kg | 章 | 03/07/13 09:51 | 03/07/13 19:44 | |
| Pyrene | ND | | 0.0756 | 0.0135 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Phenanthrene | ND | | 0.0756 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Chrysene | ND | | 0.0756 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Dibenz(a,h)anthracene | ND | | 0.0756 | 0.00789 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Fluoranthene | ND | | 0.0756 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Fluorene | ND | | 0.0756 | 0.0135 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0756 | 0.0113 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Naphthalene | ND | | 0.0756 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| 2-Methylnaphthalene | ND | | 0.0756 | 0.0180 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 19:44 | |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fa |
| 2-Fluorobiphenyl (Surr) | 60 | | 29 - 120 | | | | 03/07/13 09:51 | 03/07/13 19:44 | |
| Terphenyl-d14 (Surr) | 67 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 19:44 | |
| Nitrobenzene-d5 (Surr) | 60 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 19:44 | |
| General Chemistry | | | RL | RL | | | | Analyzed | |
| | | Qualifier | | | Unit | D | | | Dil Fa |

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 529 Laurel Bay Blvd

Date Collected: 02/28/13 13:35 Date Received: 03/06/13 08:15

Percent Solids

Lab Sample ID: 490-21055-2

Matrix: Solid

Percent Solids: 93.1

| Method: 8260B - Volatile Orga Analyte | | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|----------------|------------|----------|----------|-------|---|----------------|----------------|---------|
| Benzene | ND | | 0.00273 | 0.000913 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Ethylbenzene | ND | | 0.00273 | 0.000913 | mg/Kg | Ħ | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Naphthalene | ND | | 0.00682 | 0.00232 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 02:34 | 1 1 |
| Toluene | ND | | 0.00273 | 0.00101 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Xylenes, Total | ND | | 0.00682 | 0.000913 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02.34 | 1 |
| 4-Bromofluorobenzene (Surr) | 101 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Dibromofluoromethane (Surr) | 107 | | 70 _ 130 | | | | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Toluene-d8 (Surr) | 96 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 02:34 | 1 |
| Method: 8270D - Semivolatile | Organic Compou | nds (GC/MS | S) | | | | | | |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Acenaphthene | ND | | 0.0710 | 0.0106 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Acenaphthylene | ND | | 0.0710 | 0.00954 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Anthracene | ND | | 0.0710 | 0.00954 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Benzo[a]anthracene | ND | | 0.0710 | 0.0159 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Benzo[a]pyrene | ND | | 0.0710 | 0.0127 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Benzo[b]fluoranthene | ND | | 0.0710 | 0.0127 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.0710 | 0.00954 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Benzo[k]fluoranthene | ND | | 0.0710 | 0.0148 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| 1-Methylnaphthalene | ND | | 0.0710 | 0.0148 | mg/Kg | Ø | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Pyrene | ND | | 0.0710 | 0.0127 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Phenanthrene | ND | | 0.0710 | 0.00954 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 9 |
| Chrysene | ND | | 0.0710 | 0.00954 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.0710 | 0.00742 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Fluoranthene | ND | | 0.0710 | 0.00954 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Fluorene | ND | | 0.0710 | 0.0127 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0710 | 0.0106 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 3 |
| Naphthalene | ND | | 0.0710 | 0.00954 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| 2-Methylnaphthalene | ND | | 0.0710 | 0.0170 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl (Surr) | 62 | | 29 _ 120 | | | | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| Terphenyl-d14 (Surr) | 81 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 20:51 | 7 |
| Nitrobenzene-d5 (Surr) | 62 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 20:51 | 1 |
| General Chemistry Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |

03/07/13 08:34

0.10

0.10 %

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 490 Laurel Bay

Date Collected: 03/01/13 13:45 Date Received: 03/06/13 08:15

Percent Solids

Lab Sample ID: 490-21055-3

Matrix: Solid

Percent Solids: 92.8

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|---------------------|-----------|----------|----------|-------|---|----------------|----------------|---------|
| Benzene | ND | | 0.00225 | 0.000755 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 03:05 | - 6 |
| Ethylbenzene | ND | | 0.00225 | 0.000755 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 03:05 | 3 |
| Naphthalene | ND | | 0.00563 | 0.00191 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 03:05 | 9 |
| Toluene | ND | | 0.00225 | 0.000834 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 03:05 | |
| Xylenes, Total | ND | | 0.00563 | 0.000755 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 03:05 | |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fa |
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 03:05 | |
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 03:05 | |
| Dibromofluoromethane (Surr) | 106 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 03:05 | |
| Toluene-d8 (Surr) | 83 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 03:05 | |
| Method: 8270D - Semivola | tile Organic Compou | nds (GC/M | S) | | | | | | |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fa |
| Acenaphthene | ND | | 0.0716 | 0.0107 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Acenaphthylene | ND | | 0.0716 | 0.00962 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Anthracene | ND | | 0.0716 | 0.00962 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| Benzo[a]anthracene | ND | | 0.0716 | 0.0160 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Benzo[a]pyrene | ND | | 0.0716 | 0.0128 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Benzo[b]fluoranthene | ND | | 0.0716 | 0.0128 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| Benzo[g,h,i]perylene | ND | | 0.0716 | 0.00962 | mg/Kg | Ø | 03/07/13 09:51 | 03/07/13 21:13 | |
| Benzo[k]fluoranthene | ND | | 0.0716 | 0.0150 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| 1-Methylnaphthalene | ND | | 0.0716 | 0.0150 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Pyrene | ND | | 0.0716 | 0.0128 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| Phenanthrene | ND | | 0.0716 | 0.00962 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| Chrysene | ND | | 0.0716 | 0.00962 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Dibenz(a,h)anthracene | ND | | 0.0716 | 0.00748 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Fluoranthene | ND | | 0.0716 | 0.00962 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Fluorene | ND | | 0.0716 | 0.0128 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0716 | 0.0107 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:13 | |
| Naphthalene | ND | | 0.0716 | 0.00962 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:13 | |
| 2-Methylnaphthalene | ND | | 0.0716 | 0.0171 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:13 | |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fa |
| 2-Fluorobiphenyl (Surr) | 55 | | 29 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:13 | |
| Terphenyl-d14 (Surr) | 68 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:13 | |
| Nitrobenzene-d5 (Suπ) | 49 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:13 | |
| General Chemistry | _ | | | | | _ | | | |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fa |

03/07/13 08:34

0.10

93

0.10 %

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 517 Laurel Bay

Date Collected: 03/04/13 13:40 Date Received: 03/06/13 08:15

Analyte

Percent Solids

Lab Sample ID: 490-21055-4

Matrix: Solid

Percent Solids: 97.0

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fa |
|--------------------------------|----------------|-------------|----------|----------|-------|---|----------------|----------------|---------|
| Benzene | ND | | 0.00224 | 0.000751 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 14:03 | |
| Ethylbenzene | ND | | 0.00224 | 0.000751 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 14:03 | 18 |
| Naphthalene | ND | | 0.300 | 0.102 | mg/Kg | ¤ | 03/07/13 10:20 | 03/12/13 14:33 | 3 |
| Toluene | ND | | 0.00224 | 0.000830 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 14:03 | 9 |
| Kylenes, Total | ND | | 0.00561 | 0.000751 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 14:03 | f |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fa |
| ,2-Dichloroethane-d4 (Surr) | 117 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 14:03 | - 9 |
| ,2-Dichloroethane-d4 (Surr) | 99 | | 70 - 130 | | | | 03/07/13 10:20 | 03/12/13 14:33 | 8 |
| -Bromofluorobenzene (Surr) | 144 | X | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 14:03 | 3 |
| -Bromofluorobenzene (Surr) | 105 | | 70 - 130 | | | | 03/07/13 10:20 | 03/12/13 14:33 | 3 |
| ibromofluoromethane (Surr) | 118 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 14:03 | - 3 |
| ibromofluoromethane (Surr) | 102 | | 70 - 130 | | | | 03/07/13 10:20 | 03/12/13 14:33 | 1 |
| oluene-d8 (Surr) | 99 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 14:03 | 13 |
| oluene-d8 (Surr) | 98 | | 70.130 | | | | 03/07/13 10:20 | 03/12/13 14:33 | |
| Method: 8270D - Semivolatile (| Organic Compou | ınds (GC/MS | S) | | | | | | |
| nalyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| cenaphthene | ND | | 0.0673 | 0.0100 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | |
| cenaphthylene | ND | | 0.0673 | 0.00903 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:36 | |
| nthracene | ND | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | |
| enzo[a]anthracene | 0.660 | | 0.0673 | 0.0151 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| enzo[a]pyrene | 0.226 | | 0.0673 | 0.0120 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| enzo[b]fluoranthene | 0.675 | | 0.0673 | 0.0120 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:36 | |
| enzo[g,h,i]perylene | 0.115 | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | |
| enzo[k]fluoranthene | 0.335 | | 0.0673 | 0.0141 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 3 |
| Methylnaphthalene | ND | | 0.0673 | 0.0141 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 3 |
| yrene | 1.94 | | 0.0673 | 0.0120 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| henanthrene | ND | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | |
| hrysene | 0.673 | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 7 |
| ibenz(a,h)anthracene | 0.0474 | J | 0.0673 | 0.00703 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:36 | 9 |
| luoranthene | 1.36 | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 3 |
| luorene | ND | | 0.0673 | 0.0120 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| deno[1,2,3-cd]pyrene | 0.130 | | 0.0673 | 0.0100 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| aphthalene | ND | | 0.0673 | 0.00903 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| Methylnaphthalene | ND | | 0.0673 | 0.0161 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| urrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| -Fluorobiphenyl (Surr) | 83 | | 29 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| erphenyl-d14 (Surr) | 51 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| litrobenzene-d5 (Surr) | 54 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:36 | 1 |
| General Chemistry | | | | | | | | | |
| | | | | | | _ | | | |

Analyzed

03/07/13 08:34

RL

0.10

RL Unit

0.10 %

Prepared

Result Qualifier

97

Dil Fac

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 523 Laurel Bay

Date Collected: 02/28/13 14:30 Date Received: 03/06/13 08:15

Percent Solids

Lab Sample ID: 490-21055-5

Matrix: Solid

Percent Solids: 90.7

| Analyte | anic Compounds Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------------|--------------------------|------------|----------|----------|-------|---|----------------|----------------|---------|
| Benzene | ND | | 0.00229 | 0.000766 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Ethylbenzene | ND | | 0.00229 | 0.000766 | mg/Kg | X | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Naphthalene | ND | | 0.00572 | 0.00194 | mg/Kg | Ħ | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Toluene | ND | | 0.00229 | 0.000846 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Xylenes, Total | ND | | 0.00572 | 0.000766 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 97 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 04:07 | 1 |
| Dibromofluoromethane (Surr) | 96 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 04:07 | 3 |
| Toluene-d8 (Surr) | 97 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 04:07 | |
| Method: 8270D - Semivolatile | Organic Compou | nds (GC/MS | S) | | | | | | |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Acenaphthene | ND | | 0.0734 | 0.0110 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:59 | |
| Acenaphthylene | ND | | 0.0734 | 0.00986 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | 17 |
| Anthracene | ND | | 0.0734 | 0.00986 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | |
| Benzo[a]anthracene | ND | | 0.0734 | 0.0164 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 18 |
| Benzo[a]pyrene | ND | | 0.0734 | 0.0131 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Benzo[b]fluoranthene | ND | | 0.0734 | 0.0131 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:59 | 10 |
| Benzo[g,h,i]perylene | ND | | 0.0734 | 0.00986 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Benzo[k]fluoranthene | ND | | 0.0734 | 0.0153 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | |
| 1-Methylnaphthalene | ND | | 0.0734 | 0.0153 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 3 |
| Pyrene | ND | | 0.0734 | 0.0131 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:59 | 31 |
| Phenanthrene | ND | | 0.0734 | 0.00986 | mg/Kg | Ħ | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Chrysene | ND | | 0.0734 | 0.00986 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.0734 | 0.00767 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 3 |
| Fluoranthene | ND | | 0.0734 | 0.00986 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Fluorene | ND | | 0.0734 | 0.0131 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| ndeno[1,2,3-cd]pyrene | ND | | 0.0734 | 0.0110 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 21:59 | 31 |
| Naphthalene | ND | | 0.0734 | 0.00986 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| 2-Methylnaphthalene | ND | | 0.0734 | 0.0175 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl (Surr) | 58 | | 29 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| Terphenyl-d14 (Surr) | 73 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 21:59 | 1 |
| orphony or (our) | | | 27 _ 120 | | | | 03/07/13 09:51 | 03/07/13 21:59 | 13 |
| Nitrobenzene-d5 (Surr) | 53 | | 21 - 120 | | | | 00/01/10 00.01 | 00/01/10 21:00 | 2.2 |

03/07/13 08:34

0.10

0.10 %

91

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

Lab Sample ID: 490-21055-6

Matrix: Solid

Percent Solids: 87.9

Client Sample ID: 415 Elberberry

Date Collected: 03/01/13 14:30 Date Received: 03/06/13 08:15

| Method: 8260B - Volatile Orga | anic Compounds (| GC/MS) | | | | | | | |
|-------------------------------|------------------|-----------|----------|----------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | ND | | 0.00195 | 0.000652 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:37 | 1 |
| Ethylbenzene | ND | | 0.00195 | 0.000652 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:37 | 1 |
| Naphthalene | ND | | 0.00486 | 0.00165 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:37 | 1 |
| Toluene | ND | | 0.00195 | 0.000720 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:37 | 1 |
| Xylenes, Total | ND | | 0.00486 | 0.000652 | mg/Kg | ¤ | 03/07/13 10:22 | 03/12/13 04:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1.2-Dichloroethane-d4 (Surr) | 94 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 04:37 | 1 |

| 03/07/13 10:22 03/12/13 04:37 1 |
|---------------------------------|
| |
| 03/07/13 10:22 03/12/13 04:37 1 |
| 03/07/13 10:22 03/12/13 04:37 |
| 03/07/13 10:22 03/12/13 04:37 |
| 13 13 13 |

| Method: 8270D - Semivolatile (Analyte Acenaphthene Acenaphthylene | | nds (GC/MS Qualifier | RL 0.0749 | MDL | Unit | D | Prepared | | |
|---|-----------|-------------------------|--------------|---------|-------|---|----------------|----------------|---------|
| Acenaphthene | ND ND | Qualifier | | | Unit | D | Prepared | | |
| · | ND | | 0.0749 | | | | riepaieu | Analyzed | Dil Fac |
| Acenanhthylene | | | | 0.0112 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| riodriaphiniyidho | ND | | 0.0749 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Anthracene | | | 0.0749 | 0.0101 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Benzo[a]anthracene | ND | | 0.0749 | 0.0168 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Benzo[a]pyrene | ND | | 0.0749 | 0.0134 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Benzo[b]fluoranthene | ND | | 0.0749 | 0.0134 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.0749 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Benzo[k]fluoranthene | ND | | 0.0749 | 0.0156 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| 1-Methylnaphthalene | ND | | 0.0749 | 0.0156 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Pyrene | ND | | 0.0749 | 0.0134 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1. |
| Phenanthrene | ND | | 0.0749 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Chrysene | ND | | 0.0749 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.0749 | 0.00782 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Fluoranthene | ND | | 0.0749 | 0.0101 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Fluorene | ND | | 0.0749 | 0.0134 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0749 | 0.0112 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Naphthalene | ND | | 0.0749 | 0.0101 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| 2-Methylnaphthalene | ND | | 0.0749 | 0.0179 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl (Surr) | 59 | | 29 _ 120 | | | | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Terphenyl-d14 (Surr) | 69 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| Nitrobenzene-d5 (Surr) | 58 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 22:22 | 1 |
| General Chemistry | | | | | | | | | |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Percent Solids | 88 | | 0.10 | 0.10 | % | | | 03/07/13 08:34 | 1 |

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 503 Laurel Bay

Date Collected: 03/04/13 14:45 Date Received: 03/06/13 08:15

Percent Solids

Lab Sample ID: 490-21055-7

Matrix: Solid

Percent Solids: 92.4

| Method: 8260B - Volatile Orga Analyte | • | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|----------------|-------------|----------|----------|-------|-----|----------------|----------------|---------|
| Benzene | ND | | 0.00211 | 0.000707 | mg/Kg | Ø | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Ethylbenzene | ND | | 0.00211 | 0.000707 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Naphthalene | ND | | 0.00528 | 0.00179 | mg/Kg | 22 | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Toluene | ND | | 0.00211 | 0.000781 | mg/Kg | X | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Xylenes, Total | ND | | 0.00528 | 0.000707 | mg/Kg | n | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Dibromofluoromethane (Surr) | 96 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Toluene-d8 (Surr) | 84 | | 70 - 130 | | | | 03/07/13 10:22 | 03/12/13 05:08 | 1 |
| Method: 8270D - Semivolatile | Organic Compou | inds (GC/MS | S) | | | | | | |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Acenaphthene | ND | | 0.0704 | 0.0105 | mg/Kg | 13 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Acenaphthylene | ND | | 0.0704 | 0.00946 | mg/Kg | 133 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Anthracene | ND | | 0.0704 | 0.00946 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | 5 |
| Benzo[a]anthracene | ND | | 0.0704 | 0.0158 | mg/Kg | 10 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Benzo[a]pyrene | ND | | 0.0704 | 0.0126 | mg/Kg | D | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Benzo[b]fluoranthene | ND | | 0.0704 | 0.0126 | mg/Kg | D | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.0704 | 0.00946 | mg/Kg | Ö | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Benzo[k]fluoranthene | ND | | 0.0704 | 0.0147 | mg/Kg | ¤ | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| 1-Methylnaphthalene | ND | | 0.0704 | 0.0147 | mg/Kg | 30 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Pyrene | ND | | 0.0704 | 0.0126 | mg/Kg | 30 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Phenanthrene | ND | | 0.0704 | 0.00946 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Chrysene | ND | | 0.0704 | 0.00946 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.0704 | 0.00736 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | - 3 |
| Fluoranthene | ND | | 0.0704 | 0.00946 | mg/Kg | 100 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Fluorene | ND | | 0.0704 | 0.0126 | mg/Kg | O | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0704 | 0.0105 | mg/Kg | 33 | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Naphthalene | ND | | 0.0704 | 0.00946 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| 2-Methylnaphthalene | ND | | 0.0704 | 0.0168 | mg/Kg | n | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2-Fluorobiphenyl (Surr) | 60 | | 29 - 120 | | | | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Terphenyl-d14 (Surr) | 77 | | 13 - 120 | | | | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| Nitrobenzene-d5 (Surr) | 57 | | 27 - 120 | | | | 03/07/13 09:51 | 03/07/13 22:44 | 1 |
| General Chemistry | | | | | | | | | |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| | | | | | | | | | |

03/07/13 08:34

0.10

92

0.10 %

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

Lab Sample ID: 490-21349-A-2-G MS

Matrix: Solid

Analysis Batch: 64263

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

Prep Batch: 64010

| | Sample | Sample | Spike | MS | MS | | | | %Rec. | |
|----------------|--------|-----------|--------|----------|-----------|-------|---|------|----------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Benzene | ND | | 0.0473 | 0.04292 | | mg/Kg | | 91 | 31 - 143 | |
| Ethylbenzene | ND | | 0.0473 | 0.04345 | | mg/Kg | | 92 | 23 - 161 | |
| Naphthalene | ND | | 0.0473 | 0.007144 | | mg/Kg | | 15 | 10 - 176 | |
| Toluene | ND | | 0.0473 | 0.04318 | | mg/Kg | | 91 | 30 - 155 | |
| Xylenes, Total | ND | | 0.142 | 0.1279 | | mg/Kg | | 90 | 25 - 162 | |

Limits

70 - 130 70 - 130

70 - 130

70 - 130

Lab Sample ID: 490-21349-A-2-H MSD

Matrix: Solid

Toluene-d8 (Surr)

Surrogate

Analysis Batch: 64263

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 64010

| Allary 515 Datoll. 04200 | | | | | | | | | пср | Dutoii. | 04010 |
|--------------------------|--------|-----------|--------|----------|-----------|-------|---|------|----------|---------|-------|
| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Benzene | ND | | 0.0412 | 0.03877 | | mg/Kg | | 94 | 31 - 143 | 10 | 50 |
| Ethylbenzene | ND | | 0.0412 | 0.03835 | | mg/Kg | | 93 | 23 - 161 | 12 | 50 |
| Naphthalene | ND | | 0.0412 | 0.005577 | | mg/Kg | | 14 | 10 - 176 | 25 | 50 |
| Toluene | ND | | 0.0412 | 0.03212 | | mg/Kg | | 78 | 30 - 155 | 29 | 50 |
| Xylenes, Total | ND | | 0.124 | 0.1105 | | mg/Kg | | 89 | 25 - 162 | 15 | 50 |

MSD MSD

MS MS

%Recovery Qualifier

95

105 101

100

| Surrogate | %Recovery | Qualifier | Limits |
|-------------------------------|-----------|-----------|----------|
| 1, 2-Dichloroethane-d4 (Surr) | 97 | | 70 - 130 |
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 |
| Dibromofluoromethane (Surr) | 100 | | 70 - 130 |
| Toluene-d8 (Surr) | 83 | | 70 - 130 |

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 64263

Lab Sample ID: MB 490-64263/7

| | MD | MID | | | | | | | |
|----------------|--------|-----------|---------|----------|-------|---|----------|----------------|---------|
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | ND | | 0.00200 | 0.000670 | mg/Kg | | | 03/12/13 01:02 | 1 |
| Ethylbenzene | ND | | 0.00200 | 0.000670 | mg/Kg | | | 03/12/13 01:02 | 1 |
| Naphthalene | ND | | 0.00500 | 0.00170 | mg/Kg | | | 03/12/13 01:02 | 1 |
| Toluene | ND. | | 0.00200 | 0.000740 | mg/Kg | | | 03/12/13 01:02 | 1 |
| Xylenes, Total | ND | | 0.00500 | 0.000670 | mg/Kg | | | 03/12/13 01:02 | 1 |
| | | | | | | | | | |

| MB I | ИΒ |
|------|----|
|------|----|

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1, 2-Dichloroethane-d4 (Surr) | 103 | | 70 - 130 | | 03/12/13 01:02 | 1 |
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 | | 03/12/13 01:02 | 1 |
| Dibromofluoromethane (Surr) | 104 | | 70 - 130 | | 03/12/13 01:02 | 1 |
| Toluene-d8 (Surr) | 93 | | 70 - 130 | | 03/12/13 01:02 | 1 |

0.150

Limits

70 - 130

70 - 130

70 - 130

70 - 130

0.1607

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

LCS LCS %Recovery Qualifier

> 103 96

> > 103

94

Lab Sample ID: LCS 490-64263/4

Matrix: Solid

Analyte Benzene Ethylbenzene Naphthalene Toluene Xylenes, Total

Analysis Batch: 64263

| Client Samp | le ID | : Lab | Control | Sample |
|-------------|-------|-------|---------|----------|
| | | Dro | Type: | Total/NA |

80 - 137

| Spike | LCS | LCS | | | | %Rec. | |
|--------|---------|-----------|-------|---|------|----------|--|
| Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| 0.0500 | 0.05061 | | mg/Kg | | 101 | 75 - 127 | |
| 0.0500 | 0.05208 | | mg/Kg | | 104 | 80 - 134 | |
| 0.0500 | 0.05298 | | mg/Kg | | 106 | 69 - 150 | |
| 0.0500 | 0.04911 | | mg/Kg | | 98 | 80 - 132 | |

mg/Kg

Lab Sample ID: LCSD 490-64263/5

Matrix: Solid

Toluene-d8 (Surr)

Surrogate

Analysis Batch: 64263

1, 2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

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

107

| | Spike | LCSD | LCSD | | | | %Rec. | | RPD |
|----------------|--------|---------|-----------|-------|---|------|----------|-----|-------|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Benzene | 0.0500 | 0.04944 | | mg/Kg | | 99 | 75 - 127 | 2 | 50 |
| Ethylbenzene | 0.0500 | 0.05052 | | mg/Kg | | 101 | 80 - 134 | 3 | 50 |
| Naphthalene | 0.0500 | 0.05143 | | mg/Kg | | 103 | 69 _ 150 | 3 | 50 |
| Toluene | 0.0500 | 0.04784 | | mg/Kg | | 96 | 80 - 132 | 3 | 50 |
| Xylenes, Total | 0.150 | 0.1551 | | mg/Kg | | 103 | 80 - 137 | 4 | 50 |

LCSD LCSD

| Surrogate | %Recovery | Qualifier | Limits |
|------------------------------|-----------|-----------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 130 |
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 |
| Dibromofluoromethane (Surr) | 103 | | 70 - 130 |
| Toluene-d8 (Surr) | 96 | | 70 - 130 |

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 64361

Lab Sample ID: MB 490-64361/6

| | MB | MB | | | | | | | |
|----------------|--------|-----------|---------|----------|-------|---|----------|----------------|---------|
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | ND | | 0.00200 | 0.000670 | mg/Kg | | | 03/12/13 12:31 | 1 |
| Ethylbenzene | ND | | 0.00200 | 0.000670 | mg/Kg | | | 03/12/13 12:31 | 1 |
| Naphthalene | ND | | 0.00500 | 0.00170 | mg/Kg | | | 03/12/13 12:31 | 1 |
| Toluene | ND | | 0.00200 | 0.000740 | mg/Kg | | | 03/12/13 12:31 | 1 |
| Xylenes, Total | ND | | 0.00500 | 0.000670 | mg/Kg | | | 03/12/13 12:31 | 1 |
| | | | | | | | | | |

| | MB MB | | | |
|-------------------------------|---------------------|----------|------------------|------------|
| Surrogate | %Recovery Qualifier | Limits | Prepared Analyzo | ed Dil Fac |
| 1, 2-Dichloroethane-d4 (Surr) | 107 | 70 - 130 | 03/12/13 1 | 2:31 1 |
| 4-Bromofluorobenzene (Surr) | 103 | 70 - 130 | 03/12/13 1 | 2:31 1 |
| Dibromofluoromethane (Surr) | 105 | 70 - 130 | 03/12/13 1 | 2:31 1 |
| Toluene-d8 (Surr) | 97 | 70 - 130 | 03/12/13 1 | 2:31 1 |

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

Lab Sample ID: MB 490-64361/7

Matrix: Solid

Analysis Batch: 64361

| Client | Sample | ID: | Meth | od | Blank |
|--------|--------|------|-------|----|---------|
| | Dec | on T | Tuno: | To | A IANIA |

Prep Type: Total/NA

| | F | 7 | ı |
|--|---|---|---|

| | WID | mD | | | | | | |
|----------------|--------|-------------|--------|-------|---|----------|----------------|---------|
| Analyte | Result | Qualifier F | L MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Benzene | ND | 0.10 | 0.0335 | mg/Kg | | | 03/12/13 13:02 | 1 |
| Ethylbenzene | ND | 0.10 | 0.0335 | mg/Kg | | | 03/12/13 13:02 | 1 |
| Naphthalene | ND | 0.29 | 0.0850 | mg/Kg | | | 03/12/13 13:02 | 1 |
| Toluene | ND | 0.10 | 0.0370 | mg/Kg | | | 03/12/13 13:02 | 1 |
| Xylenes, Total | ND | 0.25 | 0.0335 | mg/Kg | | | 03/12/13 13:02 | 1 |
| | | | | | | | | |

| | MB | MB | | | | |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 70 - 130 | | 03/12/13 13:02 | 1 |
| 4-Bromofluorobenzene (Surr) | 101 | | 70 _ 130 | | 03/12/13 13:02 | 1 |
| Dibromofluoromethane (Surr) | 107 | | 70 - 130 | | 03/12/13 13:02 | 1 |
| Toluene-d8 (Surr) | 88 | | 70 - 130 | | 03/12/13 13:02 | .1 |

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 490-64361/3 Matrix: Solid

Analysis Batch: 64361

Prep Type: Total/NA

| | Spike | LCS | LCS | | | | %Rec. | |
|----------------|--------|---------|-----------|-------|---|------|----------|--|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Benzene | 0.0500 | 0.05232 | | mg/Kg | | 105 | 75 - 127 | |
| Ethylbenzene | 0.0500 | 0.05358 | | mg/Kg | | 107 | 80 - 134 | |
| Naphthalene | 0.0500 | 0.05573 | | mg/Kg | | 111 | 69 - 150 | |
| Toluene | 0.0500 | 0.04871 | | mg/Kg | | 97 | 80 - 132 | |
| Xylenes, Total | 0.150 | 0.1635 | | mg/Kg | | 109 | 80 - 137 | |

LCS LCS

| Surrogate | %Recovery | Qualifier | Limits |
|------------------------------|-----------|-----------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 70 - 130 |
| 4-Bromofluorobenzene (Surr) | 96 | | 70 - 130 |
| Dibromofluoromethane (Surr) | 103 | | 70 - 130 |
| Toluene-d8 (Surr) | 92 | | 70 - 130 |

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 64361

Lab Sample ID: LCSD 490-64361/4

| | Spike | LCSD | LCSD | | | | %Rec. | | RPD |
|----------------|--------|---------|-----------|-------|---|------|----------|-----|-------|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Benzene | 0.0500 | 0.06213 | | mg/Kg | | 124 | 75 - 127 | 17 | 50 |
| Ethylbenzene | 0.0500 | 0.05404 | | mg/Kg | | 108 | 80 - 134 | 1 | 50 |
| Naphthalene | 0.0500 | 0.05706 | | mg/Kg | | 114 | 69 - 150 | 2 | 50 |
| Toluene | 0.0500 | 0.04941 | | mg/Kg | | 99 | 80 - 132 | 1 | 50 |
| Xylenes, Total | 0.150 | 0.1648 | | mg/Kg | | 110 | 80 - 137 | 1 | 50 |

LCSD LCSD

| Surrogate | %Recovery | Qualifier | Limits |
|-------------------------------|-----------|-----------|----------|
| 1, 2-Dichloroethane-d4 (Surr) | 119 | | 70 - 130 |
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 |
| Dibromofluoromethane (Surr) | 121 | | 70 - 130 |
| Toluene-d8 (Surr) | 90 | | 70 - 130 |

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

MS MS

%Recovery Qualifier

111

92

106

95

Lab Sample ID: 490-21338-A-10-E MS Matrix: Solid

Analysis Batch: 64361

| Client | Sample | ID: | Matrix | Spike |
|--------|--------|-----|--------|--------|
| | Dror | T | me To | tal/NA |

| | | | - | | |
|---|------|------|----|------|--|
| 4 | 6446 | tch: | Ba | Prep | |
| | • | | | | |

| | Sample | Sample | эріке | MO | MS | | | | %Rec. | |
|----------------|--------|-----------|--------|---------|-----------|-------|---|------|----------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Benzene | ND | | 0.0424 | 0.03760 | | mg/Kg | | 89 | 31 - 143 | |
| Ethylbenzene | ND | | 0.0424 | 0.04025 | | mg/Kg | | 95 | 23 - 161 | |
| Naphthalene | ND | | 0.0424 | 0.01867 | | mg/Kg | | 44 | 10 - 176 | |
| Toluene | ND | | 0.0424 | 0.03692 | | mg/Kg | | 87 | 30 - 155 | |
| Xylenes, Total | ND | | 0.127 | 0.1189 | | mg/Kg | | 94 | 25 _ 162 | |
| | | | | | | | | | | |

Limits

70 - 130

70 - 130

70 - 130

70 - 130

| Lab Sample ID: | 490-21338-A-10-F | MSD |
|----------------|------------------|-----|
|----------------|------------------|-----|

Matrix: Solid

Toluene-d8 (Surr)

Surrogate

Analysis Batch: 64361

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

| Client Sample ID: Matrix Spike Duplicate | |
|--|--|
| Prep Type: Total/NA | |
| Prep Batch: 64464 | |

| Analysis Daten. 04001 | | | | | | | | | 1 i ep | Datell. | TUTTUT |
|-----------------------|--------|-----------|--------|---------|-----------|-------|---|------|----------|---------|--------|
| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Benzene | ND | | 0.0420 | 0.03774 | | mg/Kg | | 90 | 31 - 143 | 0 | 50 |
| Ethylbenzene | ND | | 0.0420 | 0.04078 | | mg/Kg | | 97 | 23 - 161 | 1 | 50 |
| Naphthalene | ND | | 0.0420 | 0.01822 | | mg/Kg | | 43 | 10 - 176 | 2 | 50 |
| Toluene | ND | | 0.0420 | 0.03831 | | mg/Kg | | 91 | 30 - 155 | 4 | 50 |
| Xylenes, Total | ND | | 0.126 | 0.1218 | | mg/Kg | | 97 | 25 - 162 | 2 | 50 |
| | | | | | | | | | | | |

| MSD | MSD |
|-----|-----|

| Surrogate | %Recovery | Qualifier | Limits |
|------------------------------|-----------|-----------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 107 | | 70 - 130 |
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 |
| Dibromofluoromethane (Surr) | 106 | | 70 - 130 |
| Toluene-d8 (Surr) | 96 | | 70 - 130 |

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

Lab Sample ID: MB 490-63419/1-A

Matrix: Solid

Analysis Batch: 63602

| Client Sample ID: Method Blank |
|--------------------------------|
| Prep Type: Total/NA |
| Dran Bataly 62440 |

Prep Batch: 63419

| | MB MB | | | | | | | |
|----------------------|------------------|--------|---------|-------|-----|----------------|----------------|---------|
| Analyte | Result Qualifier | r RL | MDL | Unit | , D | Prepared | Analyzed | Dil Fac |
| Acenaphthene | ND | 0.0670 | 0.0100 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Acenaphthylene | ND | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Anthracene | ND | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Benzo[a]anthracene | ND | 0.0670 | 0.0150 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Benzo[a]pyrene | ND | 0.0670 | 0.0120 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Benzo[b]fluoranthene | ND | 0.0670 | 0.0120 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Benzo[g,h,i]perylene | ND | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Benzo[k]fluoranthene | ND | 0.0670 | 0.0140 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| 1-Methylnaphthalene | ND | 0.0670 | 0.0140 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Pyrene | ND | 0.0670 | 0.0120 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Phenanthrene | ND | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

_ ;

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

Lab Sample ID: MB 490-63419/1-A

Matrix: Solid

Analysis Batch: 63602

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63419

| | MB | MR | | | | | | | |
|------------------------|--------|-----------|--------|---------|-------|---|----------------|----------------|---------|
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| Chrysene | ND | | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.0670 | 0.00700 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Fluoranthene | ND | | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Fluorene | ND | | 0.0670 | 0.0120 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.0670 | 0.0100 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| Naphthalene | ND | | 0.0670 | 0.00900 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| 2-Methylnaphthalene | ND | | 0.0670 | 0.0160 | mg/Kg | | 03/07/13 09:51 | 03/07/13 18:13 | 1 |
| | | | | | | | | | |

мв мв %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 29 - 120 03/07/13 09:51 03/07/13 18:13 65 2-Fluorobiphenyl (Surr) 03/07/13 09:51 03/07/13 18:13 Terphenyl-d14 (Surr) 82 13 - 120 61 27 - 120 03/07/13 09:51 03/07/13 18:13 Nitrobenzene-d5 (Surr)

Lab Sample ID: LCS 490-63419/2-A

Matrix: Solid

Analysis Batch: 63602

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

Prep Batch: 63419

| Analysis Batch: 63602 | | | | | | rieh |
|------------------------|-------|------------------|-------|---|------|----------|
| | Spike | LCS LCS | | | | %Rec. |
| Analyte | Added | Result Qualifier | Unit | D | %Rec | Limits |
| Acenaphthylene | 1.67 | 1.471 | mg/Kg | | 88 | 38 - 120 |
| Anthracene | 1.67 | 1.442 | mg/Kg | | 87 | 46 - 124 |
| Benzo[a]anthracene | 1.67 | 1.417 | mg/Kg | | 85 | 45 - 120 |
| Benzo[a]pyrene | 1.67 | 1.392 | mg/Kg | | 84 | 45 - 120 |
| Benzo[b]fluoranthene | 1.67 | 1.399 | mg/Kg | | 84 | 42 - 120 |
| Benzo[g,h,i]perylene | 1.67 | 1.435 | mg/Kg | | 86 | 38 - 120 |
| Benzo[k]fluoranthene | 1.67 | 1.427 | mg/Kg | | 86 | 42 - 120 |
| 1-Methylnaphthalene | 1.67 | 1.331 | mg/Kg | | 80 | 32 - 120 |
| Pyrene | 1.67 | 1.419 | mg/Kg | | 85 | 43 - 120 |
| Phenanthrene | 1.67 | 1.504 | mg/Kg | | 90 | 45 _ 120 |
| Chrysene | 1.67 | 1.429 | mg/Kg | | 86 | 43 _ 120 |
| Dibenz(a,h)anthracene | 1.67 | 1.463 | mg/Kg | | 88 | 32 - 128 |
| Fluoranthene | 1.67 | 1.462 | mg/Kg | | 88 | 46 - 120 |
| Fluorene | 1.67 | 1.422 | mg/Kg | | 85 | 42 _ 120 |
| Indeno[1,2,3-cd]pyrene | 1.67 | 1.441 | mg/Kg | | 86 | 41 - 121 |
| Naphthalene | 1.67 | 1.256 | mg/Kg | | 75 | 32 - 120 |
| 2-Methylnaphthalene | 1.67 | 1.351 | mg/Kg | | 81 | 28 - 120 |
| Naphthalene | 1.67 | 1.256 | mg/Kg | | 75 | 32 |

| | LCS | LCS | |
|-------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 2-Fluorobiphenyl (Surr) | 68 | | 29 - 120 |
| Terphenyl-d14 (Surr) | 83 | | 13 - 120 |
| Nitrobenzene-d5 (Surr) | 54 | | 27 - 120 |

Lab Sample ID: 490-21055-1 MS

Matrix: Solid

Analysis Batch: 63602

| Client Sample | ID: 832 Azalea |
|----------------------|----------------|
| Prep | Type: Total/NA |

Prep Batch: 63419

| | Sample | Sample | Spike | MS | MS | | | | %Rec. | |
|----------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Acenaphthylene | ND | | 1.87 | 1.383 | | mg/Kg | Ħ | 74 | 25 - 120 | |
| Anthracene | ND | | 1.87 | 1.320 | | mg/Kg | Ħ | 71 | 28 - 125 | |

TestAmerica Nashville

3/14/2013

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

Lab Sample ID: 490-21055-1 MS

Matrix: Solid

Analysis Batch: 63602

Client Sample ID: 832 Azalea

| P | rep Type: Total/NA |
|-------|--------------------|
| | Prep Batch: 63419 |
| / D - | _ |

| 7 | |
|---|--|

| Analysis Batch. 03002 | Sample | Sample | Spike | MS | MS | | | | %Rec. | Daten. 0541. |
|------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|--------------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | |
| Benzo[a]anthracene | ND | | 1.87 | 1.313 | | mg/Kg | ¤ | 70 | 23 - 120 | |
| Benzo[a]pyrene | ND | | 1.87 | 1.268 | | mg/Kg | ¤ | 68 | 15 - 128 | |
| Benzo[b]fluoranthene | ND | | 1.87 | 1.331 | | mg/Kg | n | 71 | 12 - 133 | |
| Benzo[g,h,i]perylene | ND | | 1.87 | 1.174 | | mg/Kg | n | 63 | 22 - 120 | |
| Benzo[k]fluoranthene | ND | | 1.87 | 1.301 | | mg/Kg | n | 69 | 28 - 120 | |
| 1-Methylnaphthalene | ND | | 1.87 | 1.279 | | mg/Kg | Ħ | 68 | 10 - 120 | |
| Pyrene | ND | | 1.87 | 1.327 | | mg/Kg | Ħ | 71 | 20 - 123 | |
| Phenanthrene | ND | | 1.87 | 1.390 | | mg/Kg | Ħ | 74 | 21 - 122 | |
| Chrysene | ND | | 1.87 | 1.307 | | mg/Kg | ¤ | 70 | 20 - 120 | |
| Dibenz(a,h)anthracene | ND | | 1.87 | 1.231 | | mg/Kg | n | 66 | 12 - 128 | |
| Fluoranthene | ND | | 1.87 | 1.429 | | mg/Kg | ¤ | 76 | 10 - 143 | |
| Fluorene | ND | | 1.87 | 1.372 | | mg/Kg | n | 73 | 20 - 120 | |
| Indeno[1,2,3-cd]pyrene | ND | | 1.87 | 1.196 | | mg/Kg | ¤ | 64 | 22 - 121 | |
| Naphthalene | ND | | 1.87 | 1.241 | | mg/Kg | Ħ | 66 | 10 - 120 | |
| 2-Methylnaphthalene | ND | | 1.87 | 1.306 | | mg/Kg | ¤ | 70 | 13 - 120 | |

| Surrogate | %Recovery Qualifier | Limits |
|-------------------------|---------------------|----------|
| 2-Fluorobiphenyl (Surr) | 59 | 29 - 120 |
| Terphenyl-d14 (Surr) | 68 | 13 - 120 |
| Nitrobenzene-d5 (Surr) | 52 | 27 - 120 |

Lab Sample ID: 490-21055-1 MSD

Matrix: Solid

Analysis Batch: 63602

Client Sample ID: 832 Azalea Prep Type: Total/NA

Prep Batch: 63419

| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
|------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Acenaphthylene | ND | | 1.90 | 1.438 | | mg/Kg | n | 76 | 25 - 120 | 4 | 50 |
| Anthracene | ND | | 1.90 | 1.393 | | mg/Kg | ¤ | 73 | 28 - 125 | 5 | 49 |
| Benzo[a]anthracene | ND | | 1.90 | 1.370 | | mg/Kg | n | 72 | 23 - 120 | 4 | 50 |
| Benzo[a]pyrene | ND | | 1.90 | 1.333 | | mg/Kg | n | 70 | 15 - 128 | 5 | 50 |
| Benzo[b]fluoranthene | ND | | 1.90 | 1.381 | | mg/Kg | n | 73 | 12 - 133 | 4 | 50 |
| Benzo[g,h,i]perylene | ND | | 1.90 | 1.241 | | mg/Kg | n | 65 | 22 - 120 | 5 | 50 |
| Benzo[k]fluoranthene | ND | | 1.90 | 1.430 | | mg/Kg | n | 75 | 28 - 120 | 9 | 45 |
| 1-Methylnaphthalene | ND | | 1.90 | 1.317 | | mg/Kg | n | 69 | 10 - 120 | 3 | 50 |
| Pyrene | ND | | 1.90 | 1.401 | | mg/Kg | n | 74 | 20 - 123 | 5 | 50 |
| Phenanthrene | ND | | 1.90 | 1.460 | | mg/Kg | Ħ | 77 | 21 - 122 | 5 | 50 |
| Chrysene | ND | | 1.90 | 1.397 | | mg/Kg | n | 74 | 20 - 120 | 7 | 49 |
| Dibenz(a,h)anthracene | ND | | 1.90 | 1.299 | | mg/Kg | n | 69 | 12 - 128 | 5 | 50 |
| Fluoranthene | ND | | 1.90 | 1.506 | | mg/Kg | n | 79 | 10 - 143 | 5 | 50 |
| Fluorene | ND | | 1.90 | 1.399 | | mg/Kg | Ħ | 74 | 20 - 120 | 2 | 50 |
| Indeno[1,2,3-cd]pyrene | ND | | 1.90 | 1.258 | | mg/Kg | n | 66 | 22 - 121 | 5 | 50 |
| Naphthalene | ND | | 1.90 | 1.274 | | mg/Kg | Ħ | 67 | 10 - 120 | 3 | 50 |
| 2-Methylnaphthalene | ND | | 1.90 | 1.328 | | mg/Kg | ¤ | 70 | 13 - 120 | 2 | 50 |
| | | | | | | | | | | | |

MSD MSD

| Surrogate | %Recovery | Qualifier | Limits |
|-------------------------|-----------|-----------|----------|
| 2-Fluorobiphenyl (Surr) | 57 | | 29 - 120 |
| Terphenyl-d14 (Surr) | 69 | | 13 - 120 |

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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

Lab Sample ID: 490-21055-1 MSD Matrix: Solid

Analysis Batch: 63602

MSD MSD

Surrogate %Recovery Qualifier Nitrobenzene-d5 (Surr)

Client Sample ID: 832 Azalea Prep Type: Total/NA

Client Sample ID: 832 Azalea

Prep Batch: 63419

Limits 27 _ 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-21055-1 DU

Matrix: Solid

Analysis Batch: 63370

Analyte Percent Solids

Sample Sample Result Qualifier 87

DU DU Result Qualifier 88

Unit %

0.5

RPD RPD

Prep Type: Total/NA

Limit 20

QC Association Summary

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

GC/MS VOA

| Pre | p Ba | tch: | 63451 |
|-----|------|------|-------|
|-----|------|------|-------|

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 5035 | |

Prep Batch: 63452

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|---------------------|-----------|--------|--------|------------|
| 490-21055-1 | 832 Azalea | Total/NA | Solid | 5035 | |
| 490-21055-2 | 529 Laurel Bay Blvd | Total/NA | Solid | 5035 | |
| 490-21055-3 | 490 Laurel Bay | Total/NA | Solid | 5035 | |
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 5035 | |
| 490-21055-5 | 523 Laurel Bay | Total/NA | Solid | 5035 | |
| 490-21055-6 | 415 Elberberry | Total/NA | Solid | 5035 | |
| 490-21055-7 | 503 Laurel Bay | Total/NA | Solid | 5035 | |

Prep Batch: 64010

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-21349-A-2-G MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 490-21349-A-2-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Analysis Batch: 64263

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-21055-1 | 832 Azalea | Total/NA | Solid | 8260B | 63452 |
| 490-21055-2 | 529 Laurel Bay Blvd | Total/NA | Solid | 8260B | 63452 |
| 490-21055-3 | 490 Laurel Bay | Total/NA | Solid | 8260B | 63452 |
| 490-21055-5 | 523 Laurel Bay | Total/NA | Solid | 8260B | 63452 |
| 490-21055-6 | 415 Elberberry | Total/NA | Solid | 8260B | 63452 |
| 490-21055-7 | 503 Laurel Bay | Total/NA | Solid | 8260B | 63452 |
| 490-21349-A-2-G MS | Matrix Spike | Total/NA | Solid | 8260B | 64010 |
| 490-21349-A-2-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 8260B | 64010 |
| LCS 490-64263/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 490-64263/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |
| MB 490-64263/7 | Method Blank | Total/NA | Solid | 8260B | |

Analysis Batch: 64361

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------------------------|--|----------------------|----------------|----------------|------------|
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 8260B | 63451 |
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 8260B | 63452 |
| 490-21338-A-10-E MS | Matrix Spike | Total/NA | Solid | 8260B | 64464 |
| 490-21338-A-10-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8260B | 64464 |
| LCS 490-64361/3 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 490-64361/4 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |
| MB 490-64361/6 | Method Blank | Total/NA | Solid | 8260B | |
| MB 490-64361/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCSD 490-64361/4 MB 490-64361/6 | Lab Control Sample Dup Method Blank | Total/NA Total/NA | Solid Solid | 8260B 8260B | |

Prep Batch: 64464

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 490-21338-A-10-E MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 490-21338-A-10-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

TestAmerica Nashville

Page 20 of 29

QC Association Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

GC/MS Semi VOA

Prep Batch: 63419

| Lab Sample ID | ClientSampleID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|---------------------|-----------|--------|--------|------------|
| 490-21055-1 | 832 Azalea | Total/NA | Solid | 3550C | |
| 490-21055-1 MS | 832 Azalea | Total/NA | Solid | 3550C | |
| 490-21055-1 MSD | 832 Azalea | Total/NA | Solid | 3550C | |
| 490-21055-2 | 529 Laurel Bay Blvd | Total/NA | Solid | 3550C | |
| 490-21055-3 | 490 Laurel Bay | Total/NA | Solid | 3550C | |
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 3550C | |
| 490-21055-5 | 523 Laurel Bay | Total/NA | Solid | 3550C | |
| 490-21055-6 | 415 Elberberry | Total/NA | Solid | 3550C | |
| 490-21055-7 | 503 Laurel Bay | Total/NA | Solid | 3550C | |
| LCS 490-63419/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| MB 490-63419/1-A | Method Blank | Total/NA | Solid | 3550C | |

Analysis Batch: 63602

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|---------------------|-----------|--------|--------|------------|
| 490-21055-1 | 832 Azalea | Total/NA | Solid | 8270D | 63419 |
| 490-21055-1 MS | 832 Azalea | Total/NA | Solid | 8270D | 63419 |
| 490-21055-1 MSD | 832 Azalea | Total/NA | Solid | 8270D | 63419 |
| 490-21055-2 | 529 Laurel Bay Blvd | Total/NA | Solid | 8270D | 63419 |
| 490-21055-3 | 490 Laurel Bay | Total/NA | Solid | 8270D | 63419 |
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | 8270D | 63419 |
| 490-21055-5 | 523 Laurel Bay | Total/NA | Solid | 8270D | 63419 |
| 490-21055-6 | 415 Elberberry | Total/NA | Solid | 8270D | 63419 |
| 490-21055-7 | 503 Laurel Bay | Total/NA | Solid | 8270D | 63419 |
| LCS 490-63419/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 63419 |
| MB 490-63419/1-A | Method Blank | Total/NA | Solid | 8270D | 63419 |

General Chemistry

Analysis Batch: 63370

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------|---------------------|-----------|--------|----------|------------|
| 490-21055-1 | 832 Azalea | Total/NA | Solid | Moisture | |
| 490-21055-1 DU | 832 Azalea | Total/NA | Solid | Moisture | |
| 490-21055-2 | 529 Laurel Bay Blvd | Total/NA | Solid | Moisture | |
| 490-21055-3 | 490 Laurel Bay | Total/NA | Solid | Moisture | |
| 490-21055-4 | 517 Laurel Bay | Total/NA | Solid | Moisture | |
| 490-21055-5 | 523 Laurel Bay | Total/NA | Solid | Moisture | |
| 490-21055-6 | 415 Elberberry | Total/NA | Solid | Moisture | |
| 490-21055-7 | 503 Laurel Bay | Total/NA | Solid | Moisture | |

TestAmerica Nashville

3/14/2013

Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 832 Azalea

Date Collected: 02/27/13 13:25 Date Received: 03/06/13 08:15

Date Collected: 02/28/13 13:35

Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-1

Matrix: Solid

Percent Solids: 87.3

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64263 | 03/12/13 02:03 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 19:44 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Lab Sample ID: 490-21055-2

Matrix: Solid

Percent Solids: 93.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|---------------|-----------------|-----|--------------------|-----------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64263 | 03/12/13 02:34 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 20:51 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Client Sample ID: 490 Laurel Bay

Client Sample ID: 529 Laurel Bay Blvd

Date Collected: 03/01/13 13:45

Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-3

Matrix: Solid

Percent Solids: 92.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|---------------|-----------------|-----|--------------------|-----------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64263 | 03/12/13 03:05 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 21:13 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Client Sample ID: 517 Laurel Bay

Date Collected: 03/04/13 13:40

Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-4

Matrix: Solid

Percent Solids: 97.0

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 63451 | 03/07/13 10:20 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64361 | 03/12/13 14:33 | KK | TAL NSH |
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64361 | 03/12/13 14:03 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 21:36 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

Client Sample ID: 523 Laurel Bay

Date Collected: 02/28/13 14:30 Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-5

Matrix: Solid

Percent Solids: 90.7

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64263 | 03/12/13 04:07 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 21:59 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Run

Dilution

Factor

Batch

63452

64263

63419

63602

63370

Number

Prepared

or Analyzed

03/07/13 10:22

03/12/13 04:37

03/07/13 09:51

03/07/13 22:22

03/07/13 08:34

Analyst

ML

KK

AK

Client Sample ID: 415 Elberberry

Batch

Type

Prep

Prep

Analysis

Analysis

Analysis

Batch

Method

5035

8260B

3550C

8270D

Moisture

Date Collected: 03/01/13 14:30 Date Received: 03/06/13 08:15

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Lab Sample ID: 490-21055-6

Matrix: Solid

Percent Solids: 87.9

Lab TAL NSH TAL NSH TAL NSH

TAL NSH

TAL NSH

Client Sample ID: 503 Laurel Bay

Date Collected: 03/04/13 14:45 Date Received: 03/06/13 08:15

Lab Sample ID: 490-21055-7

Matrix: Solid

Percent Solids: 92.4

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Туре | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 5035 | | | 63452 | 03/07/13 10:22 | ML | TAL NSH |
| Total/NA | Analysis | 8260B | | 1 | 64263 | 03/12/13 05:08 | KK | TAL NSH |
| Total/NA | Prep | 3550C | | | 63419 | 03/07/13 09:51 | AK | TAL NSH |
| Total/NA | Analysis | 8270D | | 1 | 63602 | 03/07/13 22:44 | KP | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 63370 | 03/07/13 08:34 | RS | TAL NSH |

Laboratory References:

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

Method Summary

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

TestAmerica Job ID: 490-21055-1

SDG: 1063

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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Certification Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-21055-1

SDG: 1063

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 |
| Alabama | State Program | 4 | 41150 | 05-31-13 |
| Alaska (UST) | State Program | 10 | UST-087 | 07-24-13 |
| Arizona | State Program | 9 | AZ0473 | 05-05-13 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-13 |
| California | NELAP | 9 | 1168CA | 10-31-13 |
| Canadian Assoc Lab Accred (CALA) | Canada | | 3744 | 03-08-14 |
| Connecticut | State Program | 1 | PH-0220 | 12-31-13 |
| Florida | NELAP | 4 | E87358 | 06-30-13 |
| llinois | NELAP | 5 | 200010 | 12-09-13 |
| owa | State Program | 7 | 131 | 05-01-14 |
| Kansas | NELAP | 7 | E-10229 | 10-31-13 |
| (entucky (UST) | State Program | 4 | 19 | 09-15-13 |
| ouisiana | NELAP | 6 | 30613 | 06-30-13 |
| Maryland | State Program | 3 | 316 | 03-31-13 |
| 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 | 10-09-13 |
| New Jersey | NELAP | 2 | TN965 | 06-30-13 |
| lew York | NELAP | 2 | 11342 | 04-01-13 |
| North Carolina DENR | State Program | 4 | 387 | 12-31-13 |
| lorth Dakota | State Program | 8 | R-146 | 06-30-13 |
| Dhio VAP | State Program | 5 | CL0033 | 01-19-14 |
| Oklahoma | State Program | 6 | 9412 | 08-31-13 |
| Oregon | NELAP | 10 | TN200001 | 04-30-13 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-13 |
| Rhode Island | State Program | -1 | LAO00268 | 12-30-13 |
| South Carolina | State Program | 4 | 84009 (001) | 03-28-14 |
| South Carolina | State Program | 4 | 84009 (002) | 02-23-14 |
| ennessee | State Program | 4 | 2008 | 02-23-14 |
| exas | NELAP | 6 | T104704077-09-TX | 08-31-13 |
| JSDA | Federal | | S-48469 | 11-02-13 |
| ltah | NELAP | 8 | TAN | 06-30-13 |
| /irginia | NELAP | 3 | 460152 | 06-14-13 |
| Vashington | State Program | 10 | C789 | 07-19-13 |
| Vest Virginia DEP | State Program | 3 | 219 | 02-28-14 |
| Visconsin | State Program | 5 | 998020430 | 08-31-13 |
| Vyoming (UST) | A2LA | 8 | 453.07 | 12-31-13 |

THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN

COOLER RECEIPT 1



| Cooler Received/Opened On: 3/6/2013 @0815 | nain of Custody |
|---|-----------------|
| 1. Tracking #(last 4 digits, FedEx) | |
| Courier: Fed-Ex IR Gun ID: 14740456 | |
| 2. Temperature of rep. sample or temp blank when opened: Degrees Celsius | |
| | VES NO (A) |
| 3. If Item #2 temperature Is 0°C or less, was the representative sample or temp blank frozen? | YES NUNA |
| 4. Were custody seals on outside of cooler? | YES !NUNA |
| If yes, how many and where: | |
| 5. Were the seals Intact, signed, and dated correctly? | (YES).NONA |
| 6. Were custody papers Inside cooler? | YESNONA |
| I certify that I opened the cooler and answered questions 1-6 (Intial) | <u>J</u> |
| 7. Were custody seals on containers: YES NO and Intact | YESNOQ |
| Were these signed and dated correctly? | YESNONA |
| 8. Packing mat'l used Bubblewrap Plastiched Peanuts Vermiculite Foam Insert Pape | r Other None |
| 9. Cooling process: Ice-pack Ice (direct contact) Dry ice | Other None |
| 10. Did all containers arrive in good condition (unbroken)? | NONA |
| 11. Were all container labels complete (#, date, signed, pres., etc)? | VESNONA |
| 12. Did all container labels and tags agree with custody papers? | ZESNONA |
| 13a. Were VOA vials received? | FESNONA |
| b. Was there any observable headspace present in any VOA vial? | YES. NONA 80115 |
| 14. Was there a Trip Blank In this cooler? YESNONA If multiple coolers, sequen | ^ |
| I certify that I unloaded the cooler and answered questions 7-14 (intial) | 0 |
| 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? | YESNO |
| b. Did the bottle labels indicate that the correct preservatives were used | YES NONA |
| 16. Was residual chlorine present? | YESNONA |
| Learning that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) | G |
| 17. Were custody papers properly filled out (ink, signed, etc)? | VES NONA |
| 18. Did you sign the custody papers In the appropriate place? | NONA |
| 19. Were correct containers used for the analysis requested? | ESNONA |
| 20. Was sufficient amount of sample sent in each container? | YES NONA |
| | F |
| I certify that I entered this project into LIMS and answered questions 17-20 (intial) | <u> </u> |
| I certify that I attached a label with the unique LIMS number to each container (Intlal) | () |
| 21. Were there Non-Conformance issues at login? YES Was a NCM generated? YES | # |

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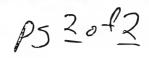
PS/0f2

| THE LEADER IN ENVIRONMENTAL | | Nashville 2960 Fost Nashville | er Crei | ightor | n | | | | hone: Free: Fax: | 800 | | 0980 |) | | | | | | metho | ods, is t | _ | hepropei being cor | - | | | | | | | |
|--|------------------------------|-------------------------------------|---------|---------------------|-----------|----------------|-------------------------------------|---------------|---|------|------------|-------------|------------|----------------|-----------|------------------|-------------------------|-----------------|-------|-----------|----------|-----------------------------|-----------|--------|-----|---|------------------------|--------------|-------------|---------------------|
| Client Name/Account #: _ | EEG - SBG # 2 | 449 | | | | | | | | | | | | | _ | | | | | | Co | mpliance | Monitorin | ng? | Yes | | No_ | | | |
| Address: | 10179 Highway | 78 | | | | | | | | | | | | | | | | | | | E | nforceme | nt Action | i? | Yes | _ | No_ | | | |
| City/State/Zip: | Ladson, SC 294 | 456 | | | | | | | | | | | | | | | Site | State: | | | | | | | | | | | | |
| Project Manager: | Tom McElwee 6 | mail: mcelv | vee@ee | eginc.r | net | | | | | | | | | | _ | | | PO#: | | 106 | 3 | | | - | | | | | | |
| Telephone Number: | 843.412.2097 | | | | | Fa | x No.: | 8 | 43 | -8 | 79. | -0 | 140 | 21 | | | TA Qu | | | | | | | | | | | | | |
| Sampler Name: (Print) | ChrisT | instal | (| | | | | | | | | | | | | | Proje | ect ID: | Laure | Bay H | ousing P | roject | | | | | | | | |
| Sampler Signature: | Clast | 3) | | | | | 1 | 2 | | | | 24 | | | 20 | | Pro | ject#: | | | | | | 251 | | | | | | |
| | 107 | / | | | | Г | | 3Pre | serva | tive | - | Ĭ | | Matri | x | | | | | | Ana | lyze For. | | | | | | | | |
| Sample ID/Description 832 AZA/EA 529 LAUREL BAY BING UGD LAUREL BAY 517 LAUREL BAY | 2/37/13 2/28/13 3/4/13 | | | X X X Grab | Composite | Field Filtered | Ice HVO ₃ (Red Label) | Method Method | NaOH (Orange Label) H ₂ SO ₄ Plastic (Yellow Label) | 1 | 2 ; 2 ; | Groundwater | Wastewater | Drinking Water | Soli Soli | Other (specify): | XXX BTEX + Napth - 8260 | X X PAH - 8270D | | | | | | oc: 49 | | | RUSH TAT (Pre-Schedule | Standard TAT | Fax Results | Send QC with report |
| | | | | | | 1 | | | | - | | 1 | | | _ | | | | | | - | - | + | 1 | 1 | | | _ | | |
| | | | _ | | | 4 | | | | 1 | - | * | - | | | | | | | - | | _ | | - | - | - | | | | |
| | Way . | | | | | - | + | Н | | - | | 1 | _ | | | | | | | - | | - | | _ | - | | | | | |
| | | | | | | 1 | 1 | | | - | | + | | | | | | | - | - | | | | 1 | _ | | | | | |
| Special Instructions: | | | | | | | Metho | ed of | Shipm | ent: | Ц | 1 | | | FI | EDE | L | | Labo | Temp | | nts: Upon Rec Headspa | | _ | | | ⊢ ∣ γ | | N N | |
| Relinquished by: | 3/5 Date | /13 | O9 | 00 | Receiv | _ • | le. | Vya ic | a. | | Á | 21 | 2 | Date | 9 | | Tim | | | | | | | | | | | | | |









| THE LEADER IN ENVIRONMENTAL | | Nashville 2960 Fost Nashville, | er Crei | ghtor | n | | | | l Free | : 80 | 5-726 0-765 5-726 | -098 | 30 | | | | | | met | issist us hods, is t ulatory pu | this wo | rk beir | - | - | | | | | | | |
|--|----------------|--------------------------------------|----------|--------|-----------|----------------|-------------|---------------|----------------------|--------------------------|-------------------------|----------|-------------|----------------|------------|-------------------------|----------|-----------|-------|---------------------------------------|---------|---------|---------|------------------|-----|-----|---|------------------------|--------------|-------------|---------------------|
| Client Name/Account#: | EEG - SBG # 24 | 49 | | | | | | | | | | | | | _ | | | | | | (| Compli | ance M | lonitorir | ng? | Yes | | No | _ | | |
| Address: | 10179 Highway | 78 | | | | | | | | | | | | | | | | | | | | Enfor | cemen | t Action | ? | Yes | _ | No | _ | | |
| City/State/Zip: | Ladson, SC 294 | 56 | | | | | | | | | | | | | | | Site | e State | : SC | | | | | | | | | | | | |
| Project Manager: | Tom McElwee e | mail: mcelw | ree@ee | ginc.r | net | | | | | _ | | _ | | | | | | PO# | _ | 10 | 6 | 3_ | | | | | | | | | _ |
| Telephone Number: | 843.412.2097 | | | _ | | Fa | x No | .: _8 | 54 | 3 | - 8 | 79 | 3-0 | 42 | מ | | TAQ | luote # | t: | | | | | | | | | | | | |
| Sampler Name: (Print) | FRA | H S | SAF | ادر | ر | | | | | | | | | | _ | | Pro | ject ID | : Lau | rel Bay F | lousing | g Proje | ct | | | | | | | | |
| Sampler Signature: | | 910 | <u> </u> | | _ | | _ | | | | _ | >- | | | _ | | Pr | oject# | : | | | | | | | | | | | | |
| | | \mathcal{A} | | | | _[| | 100 470 | eserv | ative | | ब्रा | | Ma | atrix | _ | Į, | | | _ | A | naiyze | For: | _ | | | | 1 | _ | | |
| Sample ID/Description 523 Langu/Bay 415 Elber berepy | 3/1/13 | 1430 | 5 | X Grab | Composite | Field Filtered | 80) Over | AN MAKARAMANA | NaOH (Orange Label) | H-SO_GIBBB(Yellow Label) | 2 | 1 | Groundwater | Drinking Water | Sludge | Soll , Other (specify): | | OUZG | | | | | 210 | 190 55 | | | | RUSH TAT (Pre-Schedule | Standard TAT | Fax Results | Send QC with report |
| 503 LANZO BAY | 2/4/13 | 1445 | 5 | X | | | | 17 | | | 12 | 1 | | <u></u> | | X | X. | Y | | | | | | | | | | | | | _ |
| Special Instructions: | 3/3-/ | /3 | Tim | | Recei | | | and of | Ship | ment | | | | Do | arte | FEDE | EX Tin | ne | Lab | | eratur | e Upo | n Recei | | | | | Y | , | 2 | |
| Rellifiquished by: |) Uate | | Tim | ne | Rece | ed by | | | 3 . | > . | M | 0.\ ~ | 1 2 | | ate -13 | | Tir B | ne `15 | 5 | | | | | | | | | | | | |

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-21055-1

SDG Number: 1063

List Source: TestAmerica Nashville

Login Number: 21055

List Number: 1 Creator: Ford, Easton

| orcator. Fora, Eastorn | | | | | |
|---|-------------|-------|---------|--|--|
| Question | Ar | iswer | Comment | | |
| Radioactivity wasn't checked or is = background as measured b survey meter.</td <td>y a Tr</td> <td>ue</td> <td></td> <td></td> <td></td> | y a Tr | ue | | | |
| The cooler's custody seal, if present, is intact. | Tr | ue | | | |
| Sample custody seals, if present, are intact. | Tr | ue | | | |
| The cooler or samples do not appear to have been compromised tampered with. | or Tr | ue | | | |
| Samples were received on ice. | Tr | ue | | | |
| Cooler Temperature is acceptable. | Tr | ue | | | |
| Cooler Temperature is recorded. | Tr | ue | | | |
| COC is present. | Tr | ue | | | |
| COC is filled out in ink and legible. | Tr | ue | | | |
| COC is filled out with all pertinent information. | Tr | ue | | | |
| Is the Field Sampler's name present on COC? | Tr | ue | | | |
| There are no discrepancies between the containers received and | the COC. Tr | ue | | | |
| Samples are received within Holding Time. | Tr | ue | | | |
| Sample containers have legible labels. | Tr | ue | | | |
| Containers are not broken or leaking. | Tr | ue | | | |
| Sample collection date/times are provided. | Tr | ue | | | |
| Appropriate sample containers are used. | Tr | ue | | | |
| Sample bottles are completely filled. | Tr | ue | | | |
| Sample Preservation Verified. | N/ | A | | | |
| There is sufficient vol. for all requested analyses, incl. any request MS/MSDs | ted Tr | ue | | | |
| Containers requiring zero headspace have no headspace or bubb <6mm (1/4"). | le is N/ | Α | | | |
| Multiphasic samples are not present. | Tr | ue | | | |
| Samples do not require splitting or compositing. | Tr | ue | | | |
| | | | | | |

N/A



















Residual Chlorine Checked.

ATTACHMENT A



NON-HAZARDOUS MANIFEST

| | | 1. Generator's US | EPA ID No. | Man | ifest Doc I | No. | 2. Page 1 c | of | 3 4 |
|--------|---|--------------------------|----------------------|-----------------|--------------------|--------------|----------------|----------------|--------------------------------|
| | NON-HAZAŘÍDOUS MANIFEST | George | yorub | | | | 1 | | |
| | 3. Generator's Mailing Address: | 16 | enerator's Site A | ddroce III dill | | allingly | A. Manifes | t Number | |
| | MCAS BEAUFORT | | ellerator's Site At | | erent than m | anngj: | | MNA | 04540443 |
| | LAUREL BAY HOUSING | | | | | | VVI | 01519113 | |
| | | | | | | | | | enerator's ID |
| | BEAUFORT, SC 29904 | | | | | | | | nerothrodic |
| | | 79-0411 | | | | | 35-000-25-0 | | |
| | 5. Transporter 1 Company Name | BG | 6. | US EPA ID | Number | | | | |
| | 10179 404 78 | | | | | | | ansporter's ID | |
| | 7. Transporter 2 Company Name | | 8. | US EPA ID I | Maran la ou | | D. Transpo | orter's Phone | Framposter I Product |
| | 7. Transporter 2 Company Name | | ٥. | US EPA ID I | vumber | | E State Tr | ansporter's ID | Santa Trumpungung |
| | Franklinter 2 Common Mone | | | | | | | rter's Phone | Transporter 2 Propin |
| | 9. Designated Facility Name and Site | Address | 10. | US EPA ID | Number | | r. Transpo | iter 3 Filone | |
| | HICKORY HILL LANDFILL | - Addi Coo | 10. | 03 11 7 10 | Hamber | | G. State Fa | cility ID | State Pacifity (U |
| | 2621 LOW COUNTRY DRIVE | | | | | | | | |
| | RIDGELAND, SC 29936 | | Table 17 The Control | | | | H. State Fa | acility Phone | 843-987-4643 |
| | RIDGELAND, 3C 29930 | | | | | | | | |
| | 11. Description of Waste Materials | | ****** | | 12. Co | ntainers | 13. Total | 14. Unit | I. Misc. Comments |
| G | | | | | No. | Туре | Quantity | Wt./Vol. | |
| E N | a. HEATING OIL TANK FILLED | WITH SAND | | | | Diver | antal / | Le vei | P\$ |
| E | | | | | 1 | 304 | 6.24 | TON | 706061 |
| R | WM Pro | file # 102655SC | | | = (5 to 10 | | 22. SQ | | |
| Α | b. Pynatic dame | | | | | Turne | Tobal | W-/ Vol | Engineering 1 mg |
| Ţ | | | | | | Type | CHY | 100 | |
| O R | WM Profile # | | | | 18 | La Salat | | | |
| 1 | c. Wagin lighte | | | | | | Tyrrid | | |
| | | | | | | 1 year | Oh | W1 V30 | |
| | WM Profile # | | | | | 100 | | | |
| | d. White Abina | | | | | | Total | | |
| | | | | | | - Type | Otto | L WE / WOL | |
| | WM Profile # | | | | 2 | 1500 | 10.57 | | to and the state of the second |
| | J. Additional Descriptions for Mate | | | | K. Dispos | sal Location | | | |
| | Additional Davingstina. | | | | | | | | |
| | | | | | Cell | | | | Level |
| | | | | | Grid | | | | |
| | 15. Special Handling Instructions and UST'S Peom: | d Additional Informat | ion | / | 31-1 | 415 | 190 LK | urull. | 3My 6)511 V |
| | | 2) 52 | 7 LAUN | 2014 | Jary | 1 | E07/ | 1. | / LAMRUI |
| 3 | 1 523 LAURE | BAV 3) | 415 E1 | dens | IZRe. | 15). | DUSLA | 426/19 | AY BAY |
| | Purchase Order # | | EMERO | GENCY CON | TACT / PA | ONE NO.: | | | / |
| | 16. GENERATOR'S CERTIFICATE: | | | | | | | | |
| | I hereby certify that the above-descri | ibed materials are no | t hazardous waste | es as define | d by 40 CI | FR Part 261 | or any applic | able state law | , have been fully and |
| | accurately described, classified and p | ackaged and are in p | | | | ording to ap | plicable regul | ations. | |
| | Printed Name | 7 11 | Signature | "On behalf | of" | - | | | Month Day Year |
| Н | (0).6. | DOKO1 2. | ×. | | - | | _ | | 9 16 13 |
| T R | 17. Transporter 1 Acknowledgement | t of Receipt of Mater | · · | | | | | | I I I |
| A | Printed Name | 4 Shan | Signature | N | 11 | /_ | | | Month Day Year |
| S | 12147 | | | /// | 11 | | | | 4 16 13 |
| O R | 18. Transporter 2 Acknowledgement | t of Receipt of Mater | | | 4 | | | | 1 |
| T E | Printed Name | | Signature | : C | I | 0.0 | | | Month Day Year |
| R | JAMES BALL | wid | 10 | mus | Ka | ldhe | Property | | 9 17 13 |
| | 19. Certificate of Final Treatment/Di | isposal | | | | | | | • |
| FA | I certify, on behalf of the above listed | treatment facility, t | hat to the best of | my knowled | lge, the ab | ove-descri | oed waste w | as managed in | compliance with all |
| C I | applicable laws, regulations, permits | | | | | | | | |
| L | 20. Facility Owner or Operator: Cert | tification of receipt of | non-hazardous n | materials cov | ered by th | his manifes | | | |
| T | Printed Name | | Signature | | | 1 1 | 10 | | Month Day Year |
| | 10NI Cotie | 10 | 10 | m | Co | Lol | d | | 4 17 /3 |
| | White TREATMENT STORAGE DISD | OSAL FACILITY CODY | Dive CE | NEDATOD # | CODY | 13 | Vol | IOW- GENERA | TOD #1 CODY |

Pink- FACILITY USE ONLY

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB517TW01WG20151201

Laboratory ID: QL02016-011

91584

Matrix: Aqueous

Date Sampled:12/01/2015 1215

5030B

1

Date Received: 12/02/2015

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

8260B

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

12/08/2015 1654 SES

| Surrogate | Run 1 Q % Recovery | Acceptance Limits |
|-----------------------|-----------------------|----------------------|
| Bromofluorobenzene | 94 | 75-120 |
| 1,2-Dichloroethane-d4 | 99 | 70-120 |
| Toluene-d8 | 98 | 85-120 |
| Dibromofluoromethane | 98 | 85-115 |

PQL = Practical quantitation limit
ND = Not detected at or above the MDL

 $B = Detected in the method blank \\ J = Estimated result < PQL and <math>\geq MDL$

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

 $\label{eq:power_power} E = \mbox{Quantitation of compound exceeded the calibration range} \\ P = \mbox{The RPD between two GC columns exceeds } 40\%$

H = Out of holding timeN = Recovery is out of criteria

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Shealy Environmental Services, Inc.

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

Semivolatile Organic Compounds by GC/MS (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB517TW01WG20151201

Laboratory ID: QL02016-011

12/06/2015 1619 91435

Matrix: Aqueous

Date Sampled: 12/01/2015 1215 Date Received: 12/02/2015

3520C

1

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

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

12/10/2015 1531 DRB1

| Surrogate | Q | Run 1 % Recovery | Acceptance Limits |
|-------------------------|---|---------------------|----------------------|
| 2-Methylnaphthalene-d10 | | 71 | 15-139 |
| Fluoranthene-d10 | | 78 | 23-154 |

8270D (SIM)

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure L = LCS/LCSD failure

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

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

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

S = MS/MSD failure

Shealy Environmental Services, Inc.

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

Appendix D Regulatory Correspondence





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

July 1, 2015

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:**

Subject: IGWA Dated 7/1/2015

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

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

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

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



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

June 8, 2016

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

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

Laurel Bay Military Housing Area Multiple Properties

Dated April 2015

Dear Mr. Drawdy,

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

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

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

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

Sincerely,

Laurel Petrus

NETS

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

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

Craig Ehde (via email)

Attachment to: Petrus to Drawdy

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

Specific Property Recommendations

Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

| Permanent Mon | itoring Well Investigation recommendation (15 addresses) |
|------------------|--|
| 130 Banyan Drive | 473 Dogwood Drive |
| 256 Beech Street | 747 Blue Bell Lane |
| 285 Birch Drive | 749 Blue Bell Lane |
| 292 Birch Drive | 775 Althea Street |
| 330 Ash Street | 1034 Foxglove Street |
| 331 Ash Street | 1104 Iris Lane |
| 335 Ash Street | 1124 Iris Lane |
| 342 Ash Street | |
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| 118 Banyan Drive | 644 Dahlia Drive | |
|----------------------|----------------------|--|
| 126 Banyan Drive | 646 Dahlia Drive | |
| 127 Banyan Drive | 665 Camellia Drive | |
| 141 Laurel Bay Blvd | 699 Abelia Street | |
| 151 Laurel Bay Blvd | 744 Blue Bell Lane | |
| 224 Cypress Street | 745 Blue Bell Lane | |
| 227 Cypress Street | 751 Blue Bell Lane | |
| 257 Beech Street | 762 Althea Street | |
| 264 Beech Street | 765 Althea Street | |
| 265 Beech Street | 766 Althea Street | |
| 275 Birch Drive | 767 Althea Street | |
| 277 Birch Drive | 768 Althea Street | |
| 297 Birch Drive | 769 Althea Street | |
| 301 Ash Street | 819 Azalea Drive | |
| 306 Ash Street | 840 Azalea Drive | |
| 310 Ash Street | 878 Cobia Drive | |
| 313 Ash Street | 891 Cobia Drive | |
| 315 Ash Street | 913 Barracuda Drive | |
| 316 Ash Street | 916 Barracuda Drive | |
| 319 Ash Street | 923 Wren Lane | |
| 320 Ash Street | 1004 Bobwhite Drive | |
| 321 Ash Street | 1022 Foxglove Street | |
| 329 Ash Street | 1031 Foxglove Street | |
| 332 Ash Street | 1061 Gardenia Drive | |
| 333 Ash Street | 1064 Gardenia Drive | |
| 341 Ash Street | 1067 Gardenia Drive | |
| 347 Ash Street | 1077 Heather Street | |
| 378 Aspen Street | 1081 Heather Street | |
| 379 Aspen Street | 1101 Iris Lane | |
| 382 Aspen Street | 1105 Iris Lane | |
| 394 Acorn Street | 1142 Iris Lane | |
| 400 Elderberry Drive | 1146 Iris Lane | |
| 432 Elderberry Drive | 1218 Cardinal Lane | |
| 436 Elderberry Drive | 1240 Dove Lane | |
| 482 Laurel Bay Blvd | 1266 Dove Lane | |
| 517 Laurel Bay Blvd | 1292 Eagle Lane | |
| 586 Aster Street | 1299 Eagle Lane | |
| 632 Dahlia Drive | 1302 Eagle Lane | |
| 639 Dahlia Drive | 1336 Albatross Drive | |
| 643 Dahlia Drive | 1351 Cardinal Lane | |

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